

Contaminant Screening Study Libby Asbestos Site, Operable Unit 4 Libby, Montana

Draft Summary Report for the St. John's Lutheran Hospital Rehabilitation Center and Helipad Field

February 2006



Draft Summary Report

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Draft Summary Report for the St. John's Lutheran Hospital Rehabilitation Center and Helipad Field Libby Asbestos Site, Operable Unit 4

Work Assignment No.: 137-RIRI-08BC

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CDM

Acronyms

CDM Federal Programs Corporation

CSS contaminant screening study

EPA U. S. Environmental Protection Agency

ER Environmental Restoration

LA Libby amphibole

PLM polarized light microscopy

QA/QC quality assurance/quality control

RAWP removal action work plan RI remedial investigation SAP sampling and analysis plan

Site St. John's Lutheran Hospital Rehabilitation Center and

Helipad Field

SRC Syracuse Research Corporation

VE visual area estimation

Section 1 Introduction

The purpose of this report is to summarize contaminant screening study (CSS)/remedial investigation (RI) field activities, the pre-design inspection, as well as removal and restoration activities conducted at the St. John's Lutheran Hospital Rehabilitation Center and Helipad field (Site) in Libby, Montana. Figure 1-1 presents the site location.

Consistent with other areas of Libby, Montana, vermiculite from Vermiculite Mountain may have been used as base and/or fill material throughout the rehabilitation center and helipad field. Visual inspections were performed, and dust and soil samples were collected, to determine if vermiculite and/or Libby amphibole (LA) asbestos were present in these areas of the Site.

All investigation activities were conducted by CDM Federal Programs Corporation (CDM) in accordance with the CSS Sampling and Analysis Plan (SAP), (CDM 2002), CSS SAP, Revision 1 (CDM 2003a), and Final Draft Pre-Design Inspection Activities Work Plan (CDM 2003b). Removal and restoration activities were conducted by Environmental Restoration (ER) in accordance with the Final Draft Response Action Work Plan (RAWP) (CDM 2003c) and property-specific RAWP addendum. CDM performed removal and restoration oversight and clearance sample collection.



Section 2 Field Activities

The Site investigation consisted of a verbal interview, visual inspection for vermiculite, dust sampling, and soil sampling. Unless noted in Section 3.1, all field documentation and sample collection procedures provided or referenced in the SAP were followed. The following sections summarize investigation field activities.

2.1 Verbal Interview

An interview was conducted on June 3, 2002 with Ms. Cathryne Burrell who, at the time of the interview, was an assistant at St. John's Senior Living Homes, to determine if there were any known locations of visible vermiculite on the Site. Approximately five other residents who lived at the senior home at the time of the CSS were also interviewed. Primary structure and property assessment information field forms (IFF) were completed for the Site and during each interview, and each form is included in Appendix A. Historical activities at the Site included a W.R. Grace vermiculite bagging facility and subsequent City of Libby sports/recreation field.

2.2 Visual Inspection

As part of the initial Site investigation, the rehabilitation center and two sheds were inspected to determine if vermiculite insulation or building materials were present. A visual inspection of all structures on the Site was conducted by the CDM field team. No vermiculite insulation was observed in the three structures.

In addition, a visual inspection was performed during the soil sampling efforts to determine if any vermiculite was present in the area surrounding the rehabilitation center. Vermiculite was observed in the three garden planter boxes northeast of the rehabilitation center and a planter southeast of the rehabilitation center. Due to the minimal amount of vermiculite observed in the southeast planter, a soil sample was collected, and remedial action was based on the analytical results of that sample. Soil sample locations and results are discussed in Section 2.4.

At the time of this initial Site investigation, the Helipad field was not inspected for vermiculite. The Helipad field was investigated during a supplemental sampling visit, and an additional IFF was completed for the Helipad field which describes the locations of visible vermiculite and is also included in Appendix A. Observations for both investigations are noted in the logbook pages and FSDS included in Appendices B and C, respectively.

2.3 Dust Sampling

Dust samples were collected from the rehabilitation center and the two sheds within the Helipad field as part of the pre-design inspection, and an Exterior Inspection Checklist was completed (Appendix D). All samples were collected in accordance

CDM 2-1

with Final Draft Pre-Design Inspection Activities Work Plan (Appendix B, CDM 2003b). Analytical results for all four dust samples were non-detect for LA asbestos.

2.4 Soil Sampling

Soil sampling at the Site was initially conducted on June 12, 2002. Two samples were collected to characterize the yard and flowerbeds surrounding the rehabilitation center. Analytical results for both samples were non-detect for LA asbestos, although vermiculite was noticed in both locations during sampling.

Supplemental soil sampling was conducted on October 27, 2004 to characterize the field north and east of the rehabilitation center surrounding the Helipad. The field was divided into grids each approximately 100-feet by 100-feet or 75-feet by 150-feet, depending on site conditions. A five-point composite sample was collected from each grid square. In total, 15 soil samples were collected, at depths from 0 to 1 inch below ground surface. One sample had an LA asbestos content of less than 1%; six samples revealed trace (<0.2%) LA asbestos; and the remaining samples were non-detect for LA asbestos. Sample locations and results are presented in Figure 2-1.

During this sampling event, gross quantities of vermiculite were observed in the north and west corners of the field, and within the three planter boxes. Vermiculite was also observed in varying quantities within 10 of the 15 grids, as identified on the IFF sketch (Appendix A).

Soil samples were collected, prepared, and analyzed in accordance with procedures presented or referenced in the SAP Revision 1. All logbook pages and field sample data sheets for this event are in Appendices B and C, respectively. Analytical results for the June 2002 and October 2004 soil sampling events are included as Appendix E.

2.5 Soil Sample Processing and Analysis

As applicable to all soil samples collected under the Libby RI program, soil samples were processed at CDM's close-support facility in Denver in accordance with the soil preparation plan (CDM 2003d). After processing, samples were sent to one of five contract analytical labs and analyzed for LA asbestos using two techniques: polarized light microscopy (PLM) by visual area estimation (VE) (Syracuse Research Corporation [SRC] 2003a) and the PLM gravimetric method (SRC 2003b). EPA is in the process of evaluating the accuracy and reproducibility of each of these methods. However, based on EPA's performance evaluation study to date, PLM-VE results are currently being used to make project remediation decisions. For the purposes of this report, only PLM-VE results are presented.

2.6 Summary of Removal Activities

A summary of all removal activities, modifications to the site-specific RAWP addendum (Appendix F), and sampling results are presented in the December 16,



2005 Technical Memorandum, 2005 CDM Oversight Activities Conducted at the St. John's Hospital Helipad Property in Libby, Montana (Appendix G).

Removal and restoration activities were conducted from August 1, 2005 through October 13, 2005. A total of 7,182 cubic yards of Libby vermiculite-containing soils were removed from the Site during this period. Excavation depths generally ranged from 12 inches to 36 inches below ground surface, with a maximum depth reached of 72 inches below ground surface in the vault area located within the northwest quadrant of the property.



Section 3 Quality Assurance/Quality Control

CDM has established a formal quality assurance program to ensure consistently high quality project deliverables under its Response Action Contract with EPA. For work conducted by CDM in Libby, quality assurance/quality control (QA/QC) measures include the collection of quality control samples (such as soil duplicate samples and equipment blanks), implementation of a laboratory quality assurance program, review of project reports by a CDM-approved quality assurance staff member, and an auditing component to assess the effectiveness of the quality assurance program. The following sections describe deviations from the SAP and the implications of those deviations on project or data quality objectives.

3.1 Deviations from the Sampling and Analysis Plan

All requirements in the SAP were met without exception.

3.2 Achievement of Data Quality Objectives

The data quality objectives of this investigation were met.

3.3 Data Validation and Reporting

None of the analytical data contained in this report was further validated beyond that performed by the laboratory as part of their QA/QC program. Therefore, it is assumed that the raw data are useable for their intended purpose, which is to determine the extent of LA asbestos contamination at the Site (CSS samples) and to ensure standards for removal-related samples are met.



Section 4 References

CDM. 2002. Final Sampling and Analysis Plan, Remedial Investigation, Contaminant Screening Study, Libby Asbestos Site, Operable Unit 4. April.
______. 2003a. Final Sampling and Analysis Plan, Remedial Investigation,
Contaminant Screening Study, Revision 1, Libby Asbestos Site, Operable Unit 4. May.
______. 2003b. Final Draft Pre-Design Inspection Activities Work Plan. November.
______. 2003c. Final Draft RAWP, Libby Asbestos Project, Libby, Montana. November.
______. 2003d. Close Support Facility, Soil Preparation Plan, Libby, Montana Asbestos Project, Sample Processing. April.
SRC. 2003a. Analysis of Asbestos Fibers in Soil by Polarized Light Microscopy. SRC-LIBBY-03 (Rev. 0). March 3, 2003.
______. 2003b. Qualitative Estimation of Asbestos in Coarse Soil by Visual Examination Using Stereomicroscopy and Polarized Light Microscopy. SRC-LIBBY-01 (Rev. 1). May 20, 2003.





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Appendix A Information Field Forms

BD- 000283

LIBBY ASBESTOS PROJECT Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form

Field Logbook No 100060	Paga No.: 126 Site Visit Date:	6/3/02
Address: 308 E. 2nd 31		ion: Assisted Living Home
Occupant: Katha Land	athrune burrell Phos	ne Number: 293-2607
Owner (if different than occupant):	t. Johns Hospital Phon	ne Number: Sane
	fur Chris Zeliznak, Tom V	
Field Form Check Completed by (100	7 . A. /c c	(M)
Screening Field Check Completed by		
		<u> </u>
Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	ASISted Living Residence
Surrounding Land Use	Residential Industrial Commercial	
·	School Mining	
	Other:	
V	1000	
Year of Construction		
Square Foolage	4000 SF +/-	
Construction Material	Wood frame Masonry/Stone	1
	Other:	
Number of Floors Above Ground	1) 2 3 Other:	
Number of Rooms Per Floor Above	1 <u>-15</u> 2: 3:	
Ground	Other:	
Basement	Yes (No)	crawl space
Heating Source	Wood/Coar Electric) Propane/Gas	Ciani Spice
.	Other:	
Heat Distribution	Forced air (Radiant)	<u></u>
Treat areas resistant		
	Other:	·

Address: 308 E. 2nd 51,

BD#<u>000ZF3</u>

Data İtem	Value	Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	1 2 3 4	10 clients Temployees
	5-15 16-20 21-30 >30	remployees
Number of Children	0 1 2 3 4	
	Other:	
Years at Location	<1 1-5 5-10 10-15 >15	
Was the residence/building remodeled?	Yes No	
•	If yes,	Ì
	When (years): <2 2-5 >5	
	Where: Attic Living Areas	
	Garage Basement	
	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	
Are there any known areas of exposed vermiculite?	Yes No	
ACITICONIC!	If yes,	
	Where: Ceiling Walls	
	Floors Attic	
	Other:	

Address: 208

BD#_000283

Data Item	Value	Notes
INDOOR ASSESSMENT	•	
Vermiculite Insulation Past or Present	Attic: Yes No NA Walls: Yes No NA Basement: Yes No NA Crawl Space: Yes No NA Other:	Visual confirmation of current presence or absence required for attic. Fibugl4SS In affic
Evidence of Physical Damage?	Yes (No	
Evidence of Water Damage?	Yes No	
Evidence of vermiculite used in building materials?	Yes No	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes No NA Yard: Yes No NA Stockpiles: Yes No NA Other:	3 planters in garden used material from Raintree Nursery vernicultein yasy
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block Other: See Not e	1/8 mi from tracks

Address: 308 E. 2nd Str

BD#<u>000283</u>

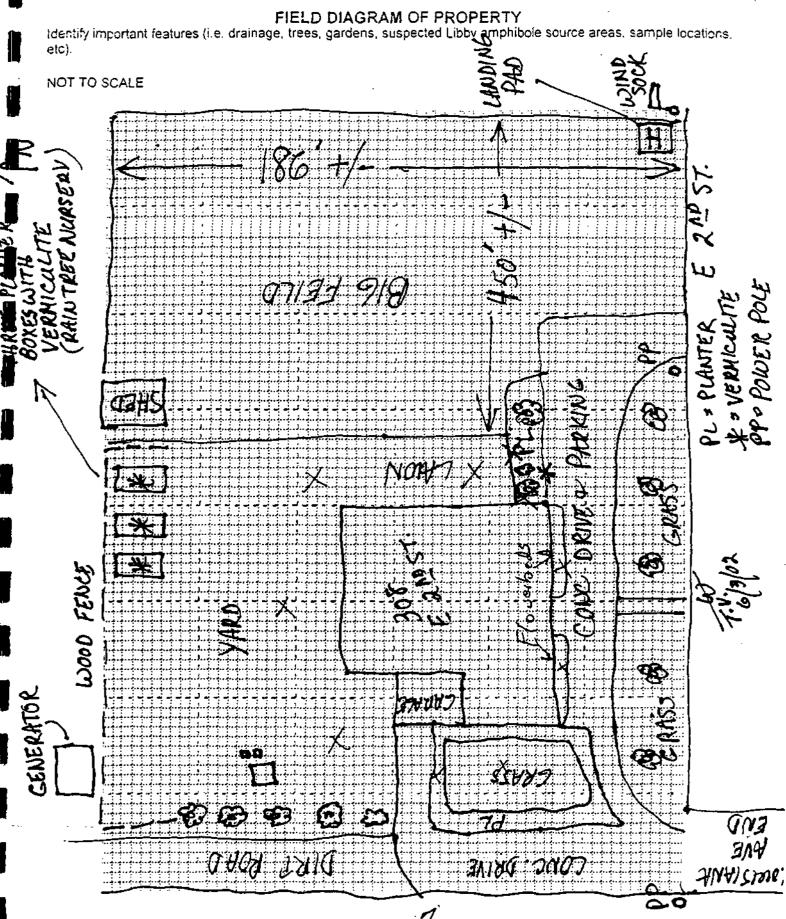
Data Item	Valu	ıe	Notes
EXPOSURE ASSESSMENT		,	
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day	
	N/A	Once a month	
	Duration of Contact:	<1 hour	
	N/A	2-4 hours	
	Extent of Contact:	Heavy Moderate Light	
Type and Frequency of Activity Near Vermiculite Material - Outdoor	Frequency:	Once a day Once a week Once a month Once a year	Plantar BOXNE part of property. She also Indicated that other employees work in the plantas.
	Duration of Contact:	1-2 hours 2-4 hours >4 hours	that other employees work in the planters
	Extent of Contact:	Heavy Moderate	

Data Item	Value	Notes			
CONTAMINANT SCREENING STUDY ASSESSMENT					
	' Occupant Information				
Is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes No Unknown	one of the clients lived near the mine.			
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes No Unknown	The client menthaned above has asbestes- related disease. Other			
	Indoor Information	clients have askestos-red diseases as well,			
Does the interior have Zonolite attic insulation?	Yes (No) Unknown	,			
Did the interior ever have Zonolite attic insulation?	Yes No .				
Are there vermiculite additives in any of the building materials?	Yes (No 20/20/07	None old soved			
	Outdoor Information				
Is there any evidence of primary source materials near the property?	Yes 2061202 No	GARDEN CZUPOL			
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes No Unknown				
	Overall Assessment				
Are primary source materials present at the property?	Yes No	Trace noted in plantas boxes and landson in a			
Where are primary source materials located?	Inside Outside Both NA	lermicalitates seen In yard and flowerheld			
ADDITIONAL INFORMATION Cathryne Burrell is the cook-assitant home at the senior living home. The manager of the facility is Nancy Gustafson. It was also stated to us that the facility is adjacent to the old Babe Ruth ball fields.					

CSS INFORMATION FIELD FORM (continued)

Address: 308 E. 2 10 ST.

во#<u>8007**83**</u>



1

Address: 308 E 2 10 9T

BD# <u>000283</u>

FIELD DIAGRAM OF PRIMARY STRUCTURE

Figor of Figure (circle): First Second Third Basement Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed.

Scale: 1/10" = 1 foot

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LIBBY ASBESTOS PROJECT Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form

	Page No.: 127 Site Visit Date:	
Address: 308 EAST ZND	Structure Descripti	on: Assisted Living Home
Occupant: <u>Charolette</u>		ne Number: 293-2607
Owner (if different than occupant):	St. John's Hospital Phon	ne Number:
Sampling Team: Bob Alexan	destathris Zelizua Emston	Vanderweel (COM)
Field Form Check Completed by (100	% of forms): Owis Zelizu	ak(CDM)
Screening Field Check Completed by		
Data Item	Value	Notes
HOUSE ATTRIBUTES	CZ 00/02/02	
Property Description	Residential Industrial Commercial	Assisted Living Residence
Surrounding Land Use	Residential Industrial Commercial	
	School Mining	
·	Other:	
Year of Construction	1997 Unknown	
Square Footage	4000 sf 7/- curre	ent
Construction Material	Wood frame Masonry/Stone	
	Other:	
Number of Floors Above Ground	1 2 3 Other:	
Number of Rooms Per Floor Above Ground	1: <u>[6</u> 2:3:	
Ground	Other:	
Basement	Yes No	
Heating Source	Wood/Coal Electric Propane/Gas	
· · · · · · · · · · · · · · · · · · ·	Other:	
Heat Distribution	Forced air Radiant	
	Other	}

CSS INFORMATION FIELD FORM (continued)

Address: 308 East 200 St.

BD# 000284

Data !tem	Value	Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	1 2 3 4	10 residents 8 employees
<u> </u>	5-15 (16-20) 21-30 >30	8 employees
Number of Children	0 1 2 3 4 Other:	
Years at Location	1-5 5-10 10-15 >15	
Was the residence/building remodeled?	Yes No	
	If yes,	
	When (years): <2 2-5 >5	
	Where: Attic Living Areas	
	Garage Basement	
·	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	
Are there any known areas of exposed vermiculite?	Yes No	
AETTHOURIE!	If yes,	
	Where: Ceiling Walls	
	Floors Attic	
	Other:	

Address: 308 East 240 5+.

BD# 000284

Data Item	Value	Notes
INDOOR ASSESSMENT	·	
Vermiculite Insulation Past or Present	Attic: Yes No NA Walls: Yes No NA Basement: Yes No NA Crawl Space: Yes No NA Other:	Visual confirmation of current presence or absence required for attic. Fibreslass: a aftiz
Evidence of Physical Damage?	Yes No	
Evidence of Water Damage?	Yes No	
Evidence of vermiculite used in building materials?	Yes	
OUTDOOR ASSESSMENT	_	
Libby Amphibole Sources Present	Garden: Yes No NA 1201 Yard: Yes No NA Stockpiles: Yes No NA Other:	Vermizulite in 3 Planters ja garden Used as cacelaloz Material came from Rain Tree Norsery
Proximity to Other Properties with Potential Sources of Libby Amphiboies	Next door Within same block Other: Alang RR.	Rain Tree Norsery Verministing youl, Aloverbeds

Address: 308 East ZND St

5D# 000284

Data Item	Valu	le	Notes
EXPOSURE ASSESSMENT			
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day Once a week Once a month Once a year	Charolette Orr lived ~ 1/8 mi from the mine
	Duration of Contact:	<1 hour 1-2 hours 2-4 hours >4 hours	For three years. Husband (decensed worked in the mine (shove) operation
	Extent of Contact:	Heavy Moderate Light	mine (shove) operati
Type and Frequency of Activity Near Vermiculite Material - Outdoor	Frequency:	Once a day Once a week Once a month Once a year	
	Duration of Contact:	<1 hour 1-2 hours 2-4 hours >4 hours	
	Extent of Contact:	Heavy Moderate Light	

Address: 308 East 2005T.

BD# 000284

Data Item	Value	Notes		
CONTAMINANT SCREENING STUDY ASSESSMENT				
	Occupant Information			
is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes No Unknown	Husband-Edward C.O worked at mine.		
Is the resident, past or present, diagnosed with an asbestos related disease?	Ves No Unknown	Asbestosis		
	Indoor Information			
Does the interior have Zonolite attic insulation?	Yes No Unknown	Building constructedin 1997- has fibrogluss (nsulation		
Did the interior ever have Zonolite attic insulation?	Yes No Unknown			
Are there vermiculite additives in any of the building materials?	Yes No Unknown			
	Outdoor Information			
Is there any evidence of primary source materials near the property?	Unknown ACOCITO 2	Flower beds & GARDEN CZU120/02		
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes No Unknown			
	Overall Assessment			
Are primary source materials present at the property?	(Yes No	Trace vermiculite in Plantors		
Where are primary source materials located?	Inside Sutside Both NA			
ADDITIONAL INFORMATION Charlotte currently resides at the Assisted Civing Community constructed ~ 5 yrs ago. She was exposed to verwiculite as bestos at her former residence				
worked as a sharel operator at the mine. Charollete has pictures of the nine operations of former residence				

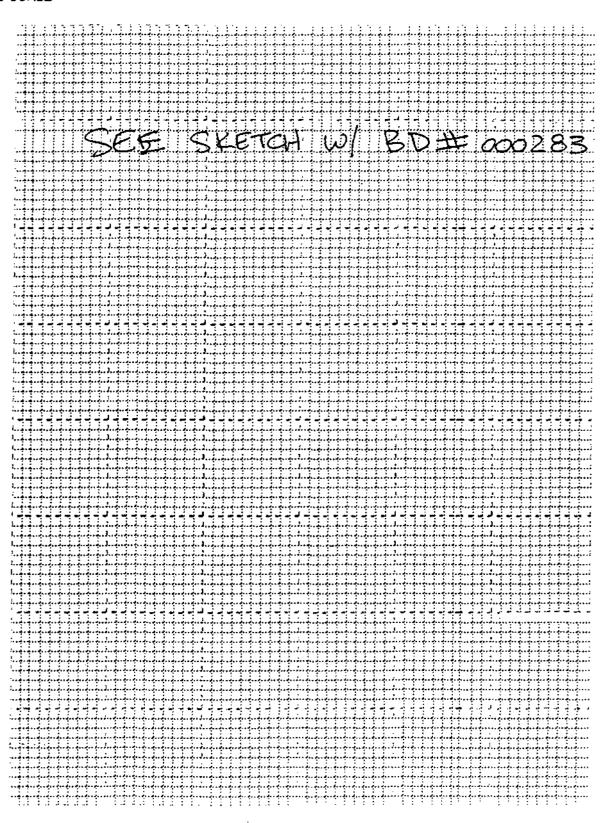
Address: 308 EAST 200 ST

BD# 000284

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, suspected Libby amphibole source areas, sample locations,

NOT TO SCALE ..



Address: 308 8

308 EAST 2ND ST _

80# 000 Z84

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle):

First

Second

Third

Basement

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed.

Scale: 1/10" = 1 foot

BD-000285 12/14/02 BD-000283

LIBBY ASBESTOS PROJECT Contaminant Screening Study

14/6/3/02

Primary Structure and Property Assessment Information Field Form

Occupant: Albart E. Velso. Owner (if different than occupant):	ST. JOHNS HOSPITAL . Pho	one Number: <u>293-2607</u>
Sampling Team: CHRIS ZELIZ	NAK COM BOB ALEXANDER COM	TOM VANDERWEEL CO
Field Form Check Completed by (10	0% of forms): TON VANDERWEEL	
Screening Field Check Completed by	y (2% of forms):	
Data Item	Value	Notes
HOUSE ATTRIBUTES	VAIUE	Hotes
Froperty Description	Residential Industrial Commercial	ASSITED LIVING HOME
Surrounding Land Use	Residential Industrial Commercial	
	School Mining	
	Other:	
Year of Construction	1997 Unknown	
Square Footage	4000 +/-	
Construction Material	Wood frame Masonry/Stone	
	Other:	
Number of Floors Above Ground	① 2 3 Other:	
Number of Rooms Per Floor Above	1:	
Ground	Other:	
Basement	Yes (No)	CRAWL SPACE
Heating Source	Wood/Coal Electric Propane/Gas	
	Other:	,
Heat Distribution	Forced air Radiant	
	Other:	

CSS INFORMATION FIELD FORM (continued)

Address: 308 E 2 ND ST

BD#<u>000285</u>

Data Item	Value	Notes	
OCCUPANT INFORMATION (*), -	•	• .,	
Number of Adults/Employees	1 2 3 4 5-15 16-20 21-30 >30	10 CLIENTS	
Number of Children	Other:		
Years at Location	<1 (1-5) 5-10 10-15 >15		
Was the residence/building remodeled?	Yes (No) If yes, When (years): <2 2-5 >5 Where: Attic Living Areas Garage Basement Other:		
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No		
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes, 10/2/08 No		
Are there any known areas of exposed vermiculite?	If yes, Where: Ceiling Walls Floors Attic	At his former Michigan Ave ddress, it was in the gard.	

CSS INFORMATION FIELD FORM (continued)

Address: 308 E 2 1 5T

BD#<u>000285</u>

Data Item	Value	Notes
INDOOR ASSESSMENT		
Vermiculite Insulation Past or Present	Aftic: Yes No NA Walls: Yes No NA Basement: Yes No NA Crawl Space: Yes No NA Other:	Visual confirmation of current presence or absence required for attic. FIBERGLASS IN ATTIC.
Evidence of Physical Damage?	Yes (No)	
Evidence of Water Damage?	Yes No	
Evidence of vermiculite used in building materials?	Yes (No)	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes No NA Yard: No NA Stockpiles: Yes No NA Other: 1207	present at his form address in his you THREE PLANTERS LISE FOR GARDEN-HATZ FRIM RAIN TREE NURSERY
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door 1. Author same block Other:/ &	His Michigan ave address was close to the (In his words) the "popping plant". FROM TRACKS

CSS INFORMATION FIELD FORM (continued)

Address: 308 E 2 10 ST.

во#<u>000235</u>

Data Item	Value		Notes
EXPOSURE ASSESSMENT			
Type and Frequency of Activity Near	Frequency:	Once a day	
Vermiculite Material - Indoor	NA	Once a week	
		Crice a month	
		Once a year	<u> </u>
	Duration of Contact:	<1 hour	
	NA	1-2 hours	
		2-4 hours	
		>4 hours	
	Extent of Contact:	Heavy	
	A I A	Moderate	
	/ / / /	Light	
Type and Frequency of Activity Near	Frequency:	Once a day	
Vermiculite Material - Outdoor	NA	Once a week	
		Once a month	
		Once a year	
	Duration of Contact:	<1 hour	
	NA	1-2 hours	
		2-4 hours	
		>4 hours	
	Extent of Contact:	Heavy	
	MA	Moderate	
	/ ///	Light	

CSS INFORMATION FIELD FORM (continued)

Address: 308 E 2 10 ST

BD#<u>00028</u>5

Data Item		Value	Notes
CONTAMINANT SCREENING STUDY A	SSESSMENT		
	Cccupar	nt Information	
is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes Unknown	(No)	
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes Unknown	No	Asbestos is
	Indoor	Information	
Does the interior have Zonolite attic insulation?	Yes Unknown	No	
Did the interior ever have Zonolite attic insulation?	Yes Unknown	No	
Are there vermiculite additives in any of the building materials?	Yes (7) 1000	No	NONE OBSERVED
	Outdoor	Information	
Is there any evidence of primary source materials near the property?	(Ves) Unkerown	(1,02	PRESENT DATE Vernicality in garden
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes Unknown	No	JO 1 0 FLOWER BEDS CZ 0/20
	Overall /	Assessment	
Are primary source materials present at the property?	Yes	No	TRACE IN GARDEN PLANTER BOXES &
Where are primary source materials located?	Inside Both	Outside NA	PROOF ENSITIONATION
ADDITIONAL INFORMATION <u>allur</u> USELTS line at 7/3 ASSISTED LI NEAR OLD	tisa for Michigan IVING HOME BABE RUI	HAY BE BALL H BOLL FEILD	residet (8 (yours). Her places. IT ON OR VERY

CSS INFORMATION FIELD FORM (continued)

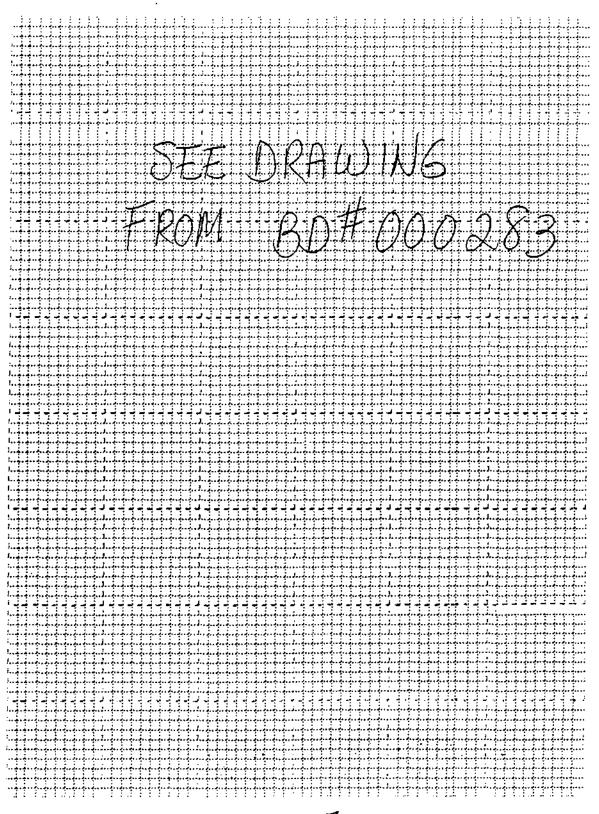
Address: 308 E 2 nE ST

вс#<u>000285</u>

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, suspected Libby amphibole source areas, sample locations, etc).

NOT TO SCALE



CS'S INFORMATION FIELD FORM (continued)

Address: 308 E 2 ND ST

90#<u>000235</u>

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle):

First

Second

Third Basement

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed,

Scale: 1/10" = 1 foot

LIBBY ASBESTOS PROJECT Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form

Field Logbook No.: 100060 F	Page No.: 129 Site Visit Date:	06/03/02
Address: 308 WEST 2	Structure Descript	tion: ASSISTED HUING RESIDENCE
Occupant: Mary	# 1 Pho	ne Number: 293 - 2607
	ST. JOHNS HOSPITAL Pho	
Sampling Team: CHRIS ZELI	ZNAK, TOMVANDERWEEL,	BOB ALEXANDER (COH)
Field Form Check Completed by (100	% of forms): CHRK ZEUZNA	e (CDH)
Screening Field Check Completed by	(2% of forms):	
		
Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	ASSISTED LIVING RESIDENCE
Surrounding Land Use	Residential Industrial commercial	
	School Mining	
	Other:	
Year of Construction	197 Unknown	-
Square Footage	40001/-	
Construction Material	Wood frame Masonry/Stone	
	Other:	
Number of Floors Above Ground	1 2 3 Other:	
Number of Rooms Per Floor Above	1:_[6 2: 3:	
Ground	Other:	
Basement	Yes No	
Heating Source	Wood/Coal Electric Propane/Gas	
	Other:	
Heat Distribution	Forced air Cadiant	
	Other:	

CSS INFORMATION FIELD FORM (continued)

L2 4/3102

Address: 308 WE EAST 200 ST

8D# 000286

Data Item	Value	Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	1 2 3 4	
	5-15 16-20 21-30 >30	
Number of Children	① 1 2 3 4	
	Other:	
Years at Location	<1 (1-5) 5-10 10-15 >15	
		·
Was the residence/building remodeled?	Yes No	
	If yes.	
	When (years): <2 2-5 >5	
	Where: Attic Living Areas	
	Garage Basement	
	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	
Are there any known areas of exposed vermiculite?	Yes No	-
vermicume ;	If yes.	
	Where: Ceiling Walls	
	Floors Attic	
j	Other:	•

Address: 308 EAST ZND ST

BD# 000 286

Data Item	Value	Notes
INDOOR ASSESSMENT		
Vermiculite Insulation Past or Present	Attic: Yes No NA Walls: Yes O NA Basement: Yes No O Crawl Space: Yes O NA Other:	Visual confirmation of current presence or absence required for attic. Fibreglass in Attic
Evidence of Physical Damage?	Yes No	
Evidence of Water Damage?	Yes No	
Evidence of vermiculite used in building materials?	Yes No	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes No NA Yard: Yes No NA Stockpiles: Yes No NA Other:	Vermiculite in three Planters used as garden. Material came from Rain Tree Nursery
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block Other: Alma R. R. Yam'.	

Address: 308 EAST 200 ST.

BD# 000 286

Data Item	Value		Notes
EXPOSURE ASSESSMENT	-		
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day Once a week Once a month	
	Duration of Contact:	Once a year <1 hour 1-2 hours 2-4 hours >4 hours	·
	Extent of Contact:	Heavy Moderate Light	
Type and Frequency of Activity Near Vermiculite Material - Outdoor	Frequency:	Once a day Once a week Once a month Once a year	į
	Duration of Contact:	<1 hour 1-2 hours 2-4 hours >4 hours	
	Extent of Contact:	Heavy Moderate Light	

Address: 308 EAST ZND ST.

BD#<u>000286</u>

Data Item	Value	Notes
CONTAMINANT SCREENING STUDY AS	SSESSMENT	
· · · · · · · · · · · · · · · · · · ·	Occupant Information	
Is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes No Unknown	
s the resident, past or present, liagnosed with an asbestos related lisease?	Yes No Unknown	·
	Indoor. Information	
Does the interior have Zonolite attic nsulation?	Yes No	Bailding constructed in 1997 - Fibreglass insulation
old the interior ever have Zonolite attic insulation?	Yes No	
re there vermiculite additives in any of ne building materials?	Yes VI 20101 (No	
	Outdoor Information	
there any evidence of primary source naterials near the property?	Yes une 06 1207	u-d flore beds (20120
ould this have been tracked indoors or the therwise spread outdoors on the toperty?	Yes No Unknown	
	Overall Assessment	
re primary source materials present at e e property?	Yes No	Trace vermiculite in planters
/here are primary source materials cated?	Inside Outside Both NA	
DDITIONAL INFORMATION Res	ident is from out building while in a	of town-has only
		,

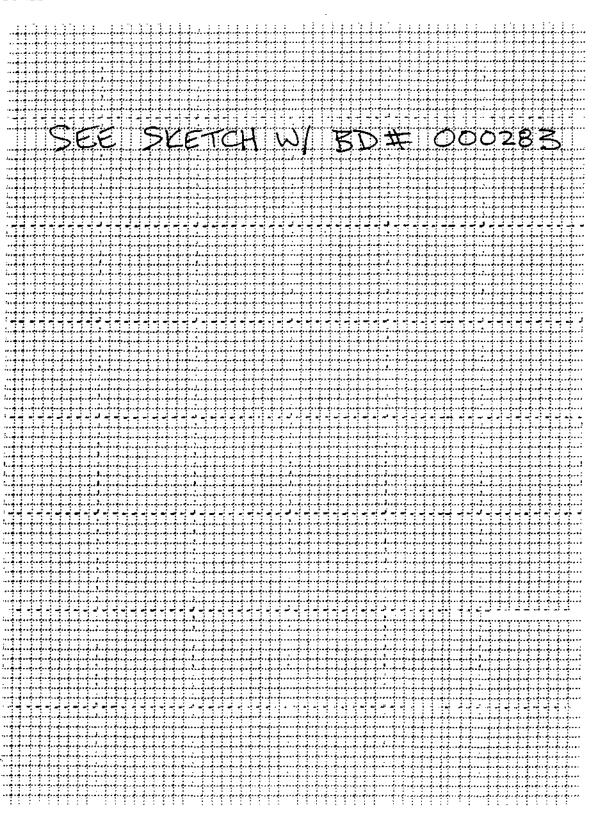
Address: 308 645T 210 ST

BD#000286

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, suspected Libby amphibole source areas, sample locations, etc)

NOT TO SCALE



Address: 308 EAST 200 ST

BD# 000286

FIELD DIAGRAM OF PRIMARY STRUCTURE

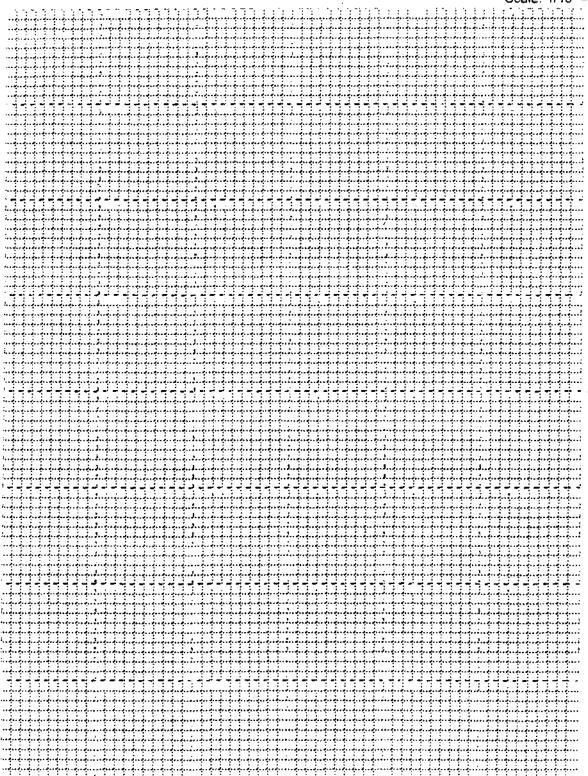
Ficor of House (pirole): First Sa

acond This

Casemont

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed.

Scale: 1/10" = 1 foot



LIBBY ASBESTOS PROJECT Contaminant Screening Study Primary Structure and Property Assessment Information Field Form

Field Logbook No. 100060	Page No.: 130 Site Visit Date:	06/03/02
Address: 308 EAST 249	Structure Descript	ion: Assisted LIVING RESIDENCE
Occupanti WALLACE B	Structure Descript EAUDRY #9 Pho	ne Number: 293-2607
	T. JOHN'S HOSPITAL Pho	
_	IZMAK, TOM VANDERWEE	
	% of forms): CHRIS ZEUZ	
Screening Field Check Completed by	(2% of forms):	
Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	ASSISTED LIVING RESIDENCE
Surrounding Land Use	Residential Industrial Commercial	
	School Mining	1
	Other:	
Year of Construction	1997 Unknown	
Square Footage	400057/	1
Construction Material		
	Other:	
Number of Floors Above Ground	1 2 3 Other:	
Number of Rooms Per Floor Above	1: <u>(6</u> 2: 3:	
Ground	Other:]
Basement	Yes No	
Heating Source	Wood/Coa Electric Propane/Gas	
	Other:	
Heat Distribution	Forced air Radiant	
	Othor	}

Address: 308 EAST 2ND ST

80#<u>00028</u>7

Data Item	Value	. Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	1 2 3 4	10 residents 8 employees
	5-15 16-20 21-30 >30	8 employees
Number of Children	6 1 2 3 4	
	Other:	- I
Years at Location	(1) 1-5 5-10 10-15 >15	
Was the residence/building remodeled?	Yes No	
	If yes,	
	When (years): <2 2-5 >5	
	Where: Attic Living Areas	
	Garage Basement	
	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	
Are there any known areas of exposed vermiculite?	Yes No	
verancume?	If yes,	,
	Where: Ceiling Walls	
	Floors Attic	
	Other:	

Address: 308 EAST 240 ST

80# 000 281

Data Item	Value	Notes
INDOOR ASSESSMENT	·· · · · ·	
Vermiculite Insulation Past or Present	Attic: Yes No NA Walls: Yes No NA Basement: Yes No NA Crawl Space: Yes No NA Other:	Visual confirmation of current presence or absence required for attic. Fibreqlass in attic
Evidence of Physical Damage?	Yes 😡	
Evidence of Water Damage?	Yes 💫	
Evidence of vermiculite used in building materials?	Yes No	
OUTDOOR ASSESSMENT	,	•
Libby Amphibole Sources Present	Garden: Yes No NA 6-12-02 Yard: Yes No NA Stockpiles: Yes No NA Other: Flouribed 5	Verwicolite in three planters used as garden-Matorial came from Rain. Tree Nursery
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block Other: Along RR	

Address: 308 EAST 200ST

80# 000 zg 7

Data Item	Value		Notes
EXPOSURE ASSESSMENT		* **	
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day	
Vermitsite waterial - moooi	(N/A)	Once a week	
		Once a month	
		Once a year	
	Duration of Contact:	<1 hour	
	Fi	1-2 hours	
	(V/A)	2-4 hours	·
		>4 hours	
	Extent of Contact:	Heavy	
	(ALIA)	Moderate	
	(III)	Light	
Type and Frequency of Activity Near	Frequency:	Once a day	
Vermiculite Material - Outdoor		Once a week	
	(N/A)	Once a month	
		Once a year	
	Duration of Contact:	<1 hour	
		1-2 hours	
	W//4)	2-4 hours	
		>4 hours	
	Extent of Contact:	Heavy	
	$(\omega)/A$	Moderate	
		Light	

Address: 308 EAST 200 ST

80#<u>000287</u>

Data Item		Value	Notes
CONTAMINANT SCREENING STUDY A	SSESSMENT	· · · · · · · · · · · · · · · · · · ·	
<u>-</u>	Occup	ant Information	
is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Unknown	02 (ic)	
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes Unknown	No	
	Indoc	or Information	
Does the interior have Zonolite attic insulation?	Yes Unknown	(NO)	Building construct edin 1997-has fibreglass insulation
Did the interior ever have Zonolite attic insulation?	Yes Unknown	No	
Are there vermiculite additives in any of the building materials?	Yes Carrolor	(No)	·
	Outdo	or Information	•
Is there any evidence of primary source materials near the property?	(Yes) Onknown Col	No Jaca	Vernicultin yard, goden, florerbel,
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes	No	
······································	Overal	i Assessment	
Are primary source materials present at the property?	Yes	No	Trace remiculite in planters
Where are primary source materials located?	Inside Both	Cutside	
ADDITIONAL INFURIATION			
		-	

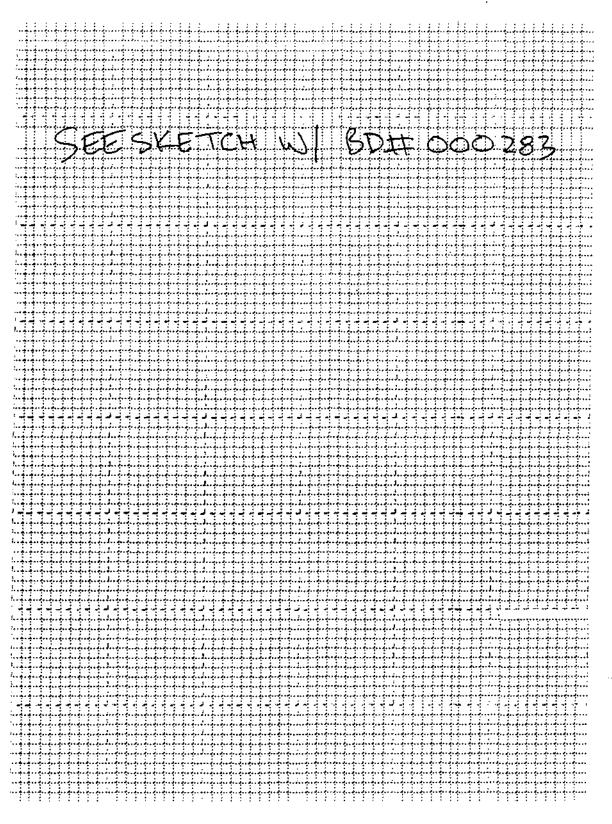
Address: 308 EAST 2ND ST.

8D#<u>000287</u>

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, suspected Libby amphibole source areas, sample locations, etc)

NOT TO SCALE



Address: 308 EAST ZND ST

BD# *O* **287**

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle): First

Second

Basement

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed.

Scale: 1/10" ≈ 1 foct

LIBBY ASBESTOS PROJECT
Contaminant Screening Study
Primary Structure and Property Assessment Information Field Form

Field Logbook No.: 100060 Address: 308 E. 2nd Str. Occupant: Frank Corf Civ Owner (if different than occupant): 54 Sampling Team: Bob Alexander Field Form Check Completed by (1009)	Vohus Hospital Pho V, Chris Zeliznati, Tom Va	ne Number: <u>5ane</u>
Screening Field Check Completed by (- 	
Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	PSS Hed Living Residence
Surrounding Land Use	Residentia Industrial Commercial School Mining Other:	
Year of Construction	1997 Unknown	
Square Footage	4,000 SF +/-	
Construction Material	Wood frame Masonry/Stone Other:	
Number of Floors Above Ground	2 3 Other:	
Number of Rooms Per Floor Above Ground	1: <u>//6</u> 2: 3: Other:	
Basement	Yes (No)	Crawl space
Heating Source	Wood/Coal Electric Propane/Gas Other:	
Heat Distribution	Forced air Radiant	

CSS INFORMATION FIELD FORM (contifued)

Address: 308 E. Znd St

80#<u>00028</u>\$

Data Item	Value	Notes
OCCUPANT INFORMATION	•	N
Number of Adults/Employees	. 1 2 3 4	10 clients
•	5-15 (16-20) 21-30 >30	8 employees
Number of Children	Other:	
Years at Location	<1 1-5 (9-10) 10-15 >15	·
Was the residence/building remodeled?	Yes No	
,	When (years): <2 2-5 >5	
	Where: Attic Living Areas	
	Garage Basement	
	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	•
Are there any known areas of exposed vermiculite?	Yes No	
Action Childe :	If yes,	
	Where: Ceiling Walls	
	Floors Attic	
1	Other:	

CSS INFORMATION FIELD FORM (continued)

Address: 308 E, 2nd St.

BD# 000288

Data Item	Value	Notes
INDOOR ASSESSMENT		
Vermiculite Insulation Past or Present	Attic: Yes No NA Walls: Yes No NA Basement: Yes No NA Crawl Space: Yes No NA Other:	Visual confirmation of current presence or absence required for attic. Fiberglass inattic
Evidence of Physical Damage?	Yes No	
Evidence of Water Damage?	Yes No	
Evidence of vermiculite used in building materials?	Yes	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes No NA MC & 1202 Yard: Yes No NA Stockpiles: Yes No NA Other:	3 planters NE of building from Raintree Nursary
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block There See Note	1/8 mi from travets tracks

Address: 308 E. 2nd St

30#*900288*

Data Item	Valu	ше ,	Notes
EXPOSURE ASSESSMENT			
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day Once a week	
	N/A	Once a month Once a year	
	Duration of Contact:	<1 hour 1-2 hours	
	N/A	2-4 hours >4 hours	
	Extent of Contact:	Heavy Moderate Light	
Type and Frequency of Activity Near Vermiculite Material - Outdoor	Frequency:	Once a week Once a month Once a year	Mr. Curl stated that he commonly works in the planta during growing Season,
. ,	Duration of Contact:	<1 hour 1-2 hours 2-4 hours >4 hours	during growing Season,
	Extent of Contact:	Heavy Moderate	

Address: 308 E. 2vd St.

30#**@00288**°

Data Item	Value	Notes
CONTAMINANT SCREENING STUDY AS	SSESSMENT	
	Occupant Information	·
Is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes (No) Unknown	
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes No Unknown	
	Indoor Information	
Does the interior have Zonolite attic insulation?	Yes No	
Did the interior ever have Zonolite attic insulation?	Yes No	·
Are there vermiculite additives in any of the building materials?	Yes U No No Unknown	None oldsaved.
	Outdoor Information	
Is there any evidence of primary source materials near the property?	Yes Molling No Urlknown	Vermicality in flowerals
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes No Uriknown	
	Overall Assessment	
Are primary source materials present at the property?	Yes No	trace verniculity note in plantors NE of building
Where are primary source materials located?	Inside Cutside Both NA	and landscaping SEOR building
Applitional Information Lines South Dalsata (Plans was a carpeter, Tie Pies son's rane is Steve	in Felipy for 2 years. ington). He workers son lives at 150 Swed	Premiusly lived in a fact the legs

Address: 308 E. 2nd St.

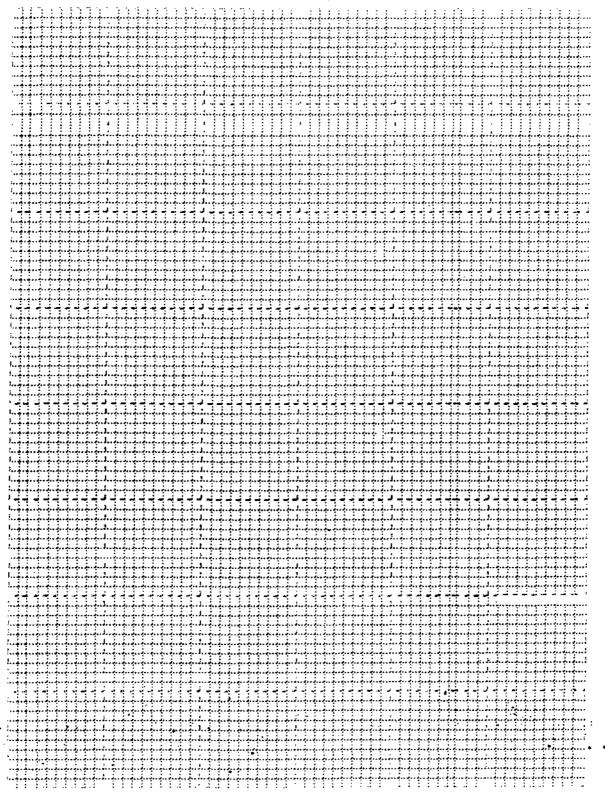
BD# 00288

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, suspected Libby amphibole source areas, sample locations, etc).

NOT TO SCALE

See sketch for BD#000283



Address: 308 E Znd St

BD#_(200288

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle):

First

Second Ti

Third

Basement

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed,

Scale: 1/10" = 1 fcot

10-27-04 AD- 000936

Soil samples collected (Date: 10/27/04)

LIBBY ASBESTOS PROJECT Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form (Primary IFF)

Field Logbook No.: 100348 Address: 308 E. 2nd S Occupant: Helipad Owner (if different than occupant): St Business Name: St. John Ho Sampling Team: 3. Shown	Structure Des Tohis Hospital	2: 10-27-04 scription: <i>NA</i> Phone Number: <u>NA</u> Phone Number: <u>263-0100</u>
9	· / · · · · · · · · · · · · · · · · · ·	
Field Form Check Completed by (100% Screening Field Check Completed by (2	//	
Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	2
Surrounding Land Use	Residential Industrial Commercial	
	School Mining	
	Other:	<u> </u>
Year of Construction	MA_ Unknown	
Square Footage	· NA	
Construction Material	Wood frame Masonry/Stone	
	Other: NA	
Number of Floors Above Ground	1 2 3 Other: <u>NA</u>	
Number of Rooms Per Floor Above Ground	1: 2: 3: Other:	
Basement .	Yes A No	
Heating Source	Wood/Coal Electric Propane/Gas	
Heat Distribution	Forced air Radiant	-

Address: 308 = 2nd St

AD-000936.

Data Item	Value	Notes
OCCUPANT INFORMATION		
Was the residence/building remodeled?	Yes 11/4 No	
	If yes.	
	When (years): <2 2-5 >5	
	Where: Attic Living Areas Garage	
	Basement	
·	Other:	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes NA No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes Possibly	
CONTAMINANT SCREENING STUDY AS	SSESSMENT	
Occupant Information		Verbal Interview Complete: 10/27/04
Is there any knowledge of former miners, close relatives of miners, or any highly exposed persons living or visiting the property?	Yes No No Unknown	If unknown, why?
Is the resident, past or present,	Yes No	If unknown, why?
diagnosed with an asbestos-related disease?	Unknown NA	
Indoor Information	<u> </u>	or Visual Inspection Complete: 10/27/84
Does the interior have vermiculite attic	Yes No	If unknown, why?
insulation?	Unknown	
Did the interior ever have vermiculite	Yes No	If unknown, why?
attic insulation?	Unknown / Nag	
NA applies if attic currently has VC1		
Are there vermiculite additives in any of	Yes No	If unknown, why?
the building materials?	Unknown	Type and location of building material:

Address: 308 E 2nd St.

AD-000936

Data Item	Value	Notes
Location of indoor vermiculite (circle all that apply)	Attic Walls Crawl Space None Visual in Living Space: Basement, Ground Floor, Second Floor, Attached Garage Other:	If in living space, provide specific location:
Outdoor Information	∑a Outdoor \	/isual Inspection Complete: 10/27/0
Location of outdoor vermiculite (circle all that apply)	Driveway Flowerbed Garden Yard Former Flowerbed Former Garden Stockpile None Offier Field	
Overall Assessment Complete: 10/37/04	Reconnaissance (Verbal Interview, Indoor, O	utdoor Inspection)
Are primary source materials present at (the property?	Yes No	
Where are primary source materials located?	Inside Outside Both NA	NA applies if no primary source materials are located at the property
ADDITIONAL INFORMATION (Note any p	contains the Helipul	This property is a for the bospital

CSS Primary Structure IFF (continued)

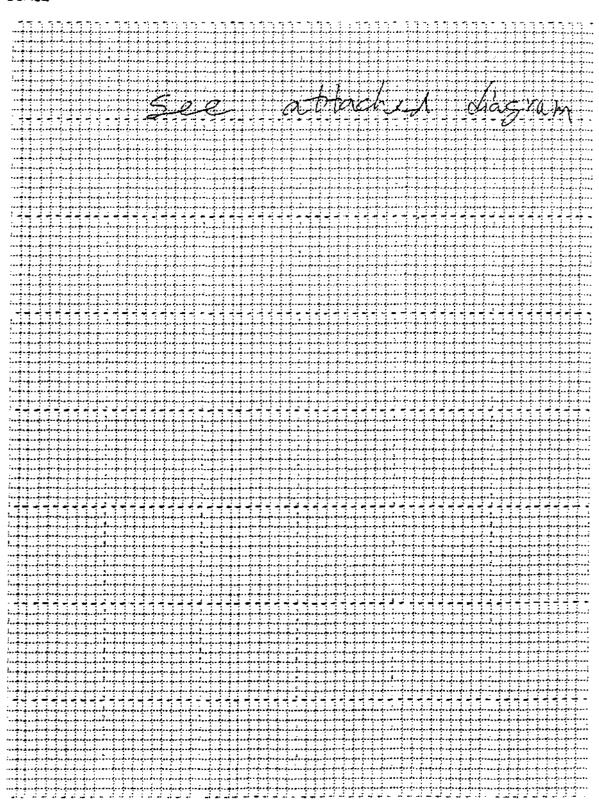
Address 30% & 2nd St

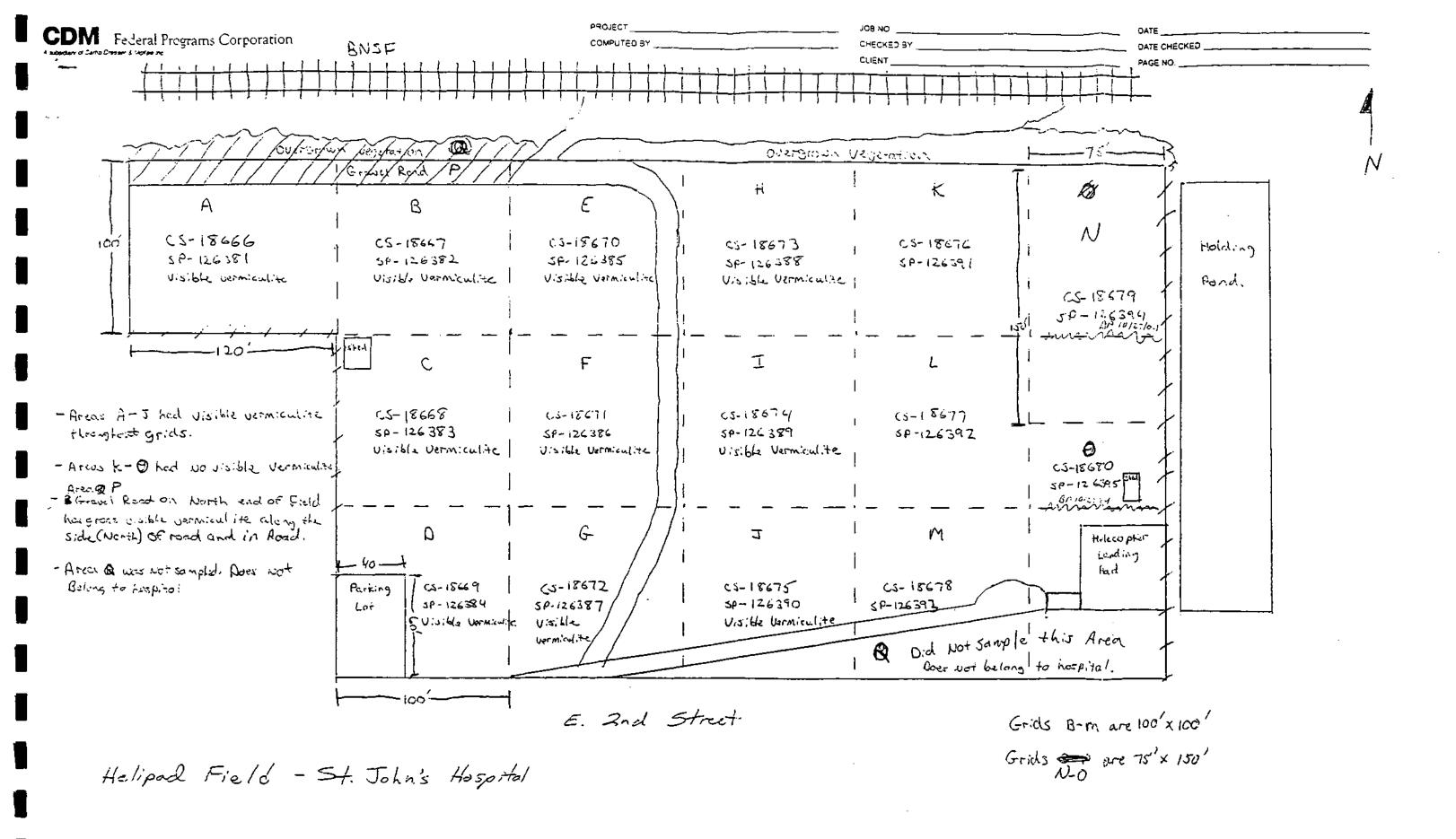
AD-000936

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, structures, flowerbeds, utility poles, known underground utilities, suspected Libby amphibole source areas, sample locations, etc). Include north arrow.

NOT TO SCALE





Appendix B Logbook Pages

CDM

126 Location 308 E 2 2 ST. Date 6/3/024 Project Chent VOLPE / EPA 1415 - ARRIVE RIVER MEADOWS -ST JOHNS SENOR LIVING HOHES. CATHRYNE BURRELL SIGNED CONSENT & IFF. FEILD FORM BOTH, FITTIC HAS FIBERGLASS + OLLT-BD- 000283 SIDE VERMICHLITE WAS OBSERVED IN GARDEN PLANTER BOXES + S.E. PLANTER. FACILITY WAS BUILT ON OR VERY CLOSE TO OLD BABE RUTH BALL FEILOS. PHOTO TAKEN-DRAWING OF PROPERTY DONE. M. Jacob Moth w/3/02

ST JOHUN MOD DITOD LIVING Location 308 FAST 200 ST Date 6/12/02 COR REGION & (VOLPE (TEUROT MEUR) 1430 - Arrive @ 308 EAST 2nd ST WALL PROPERTY, deade to collect samples from yard largers ara + Flower Beds - vermiculite WAS NOTICED IN GARDON GREA WILL NOT SAMPLE THU AKEA GRADS YARD AREA CS-00344 SP- 16924 FLOWER BEDS 65-66345 50- 110975 MIKE COFFEY SUITS UP IN LECEL C + collects SOTE SAWLES vermalite NOTICED WHILE COLLEGIAL SAMPLES FROM GRAD/ YURS area (frace) + Flower BEDS (trace to save) - CH Glace 6.P.) ID. TZEGIZOZ 6/12/02 send

Location 308 E 2 NB 5T. Date 6/3/02 127
Project / Client VOLPE / EPA

1440- FEILD FORM BO# ASSIGNED.

BD-000284 ST JDHNSSENIOR LIVING
HOMES: CHAROLETTE ORR ANSWERED
IFF & CONSENT ATTICHAS FIBERGLASS + SOME VERHICULITE WAS
OBSERVED OUTSIDE IN GARDEN
PLANTER BOXES + 5.E. PLANTER.
PHOTO THKEN + DRAWING DONE.

Jon Joulling 1

THE REAL PROPERTY.

128 Location 308 E SECOND ST. Date 6/3/02 Project Client VOLPE/EPA 1500 - FEILD FORM BO# ASSIGNED BD- 000285 ST. JOHNS SENIOR LIVING HOMES - ALBERT NELSON ANSWERED IFF & CONSENT. ATTIC HAS FIBERGLASS - OUTSIDE VERMICULITE WAS OBSERVED IN BOX PLANTERS USED FOR GARDEN & S. E. PLANTER. PHOTO & DRAWING DONSE. Jan Janhow 6/3/02

Location 308 E. SECOND 57. Date 6/3/02 Project - Chen: VOLPE/EPA 1520-FEILD FORM BO# ASSIGNED.
BD-DDD285 DI VOINS SENIOR LIVING HOMESHARY DIN ANSWERED 1FF & CONSENT ATTIC HAS FIBER-GLASS INSULATION. VERMICULITE OBSERVED OUTSIDE IN GARDEN PLANTER BOXES & S.E. PLANTER PHOTO & DIRAWING DONE. 103 Mr. January

130 Location 308 E 2 M ST Project / Client VOLPE/EPA 1540 - FEILD FORM BO# ASSIGNED.

BD- 000287 ST. JOHNS SENIOR LIVING.

40HES. WALLACE BEAUDRY ANSWERED

IFF & CONSENT. ATTIC HAS FIBER-GLASS-BUILT IN 1997. SOME VERH-PLANTER BOXES + S.E. PLANTER. PHOTO Y-DRAWING DONE, Jan Jandenson (a) 3 02

100 E 2 no 5T Project / Client VOLPE/EPA 1555- FEILD FORM BD# ASSIGNED BD= 000288 DE JOHNS SENIOR LIVING HOPES FRANKCURL ANSWERED IFF & CONSENT. ATTIC HAS FIBERGLASS. SOHE VERHICULITE OBSERVEN IN GARDEN PLANTER BOXES + S.E. PLANTER PHOTO & DRAWING DONE.

10/27/C+1. - Libby Asbertos Us EPA Region 8 ... BD-000283 St. Johns Hospita 1300 Arrivedo Site, Field East of building, nos never been sampled. Most of the Fiel. had, Visible Verniculité. Diagram à Grids Werk laid out for Sampling. FSDS=000688 -5-000692. Sampled under CSS protocol. See diagram SP-126381 1350 C2-18666 for sample SP-126382 1357C5-18667 locations 5P-126383 1410 CS - 1866 9 59-12 (384 1419 CS - 18669 SP-126385 1435 CS-18 670 SP-126386 1445CS- 18671 SP-126387 1500 CS- 1867Z SP-126388 15605-18673 SP-126389 152705-18674 SP-126390 1537CS-18675 SA 126391 1545C5-18676 SP-126392 1605 CS-18677 50-126343 1628C5-18678 58-126394 1638 CS-18679 SP-126395 1700 CS-18680 All locations wer GAS'd in TGA10274. Photos & Measurement (Grids) + diagram Completed. weather Surry 55°, All Sampling IAW Producing Final Rose Work Plan 2003 le further po

Appendix C Field Sample Data Sheets

Sheet No.: CSS (S) - 000164

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET FOR SOIL

Scenario No.: 1/	l Field Logbook No: /6	6676 Page No.53.59	Sampling Date: 6/12/02
	EAST Jul ST	Owner: 57 75 UNS	
Land Use: (circle) (F	Residential School Comm	ercial Mining Roadway	•
Sampling Team: (cir	rcle) CDM PES Other	Names: Myke Cot	FEY/ Ses HUNT
		Y Ma	lov
Data Item	Sample 1	comple 2	Sample 3
Index ID	CS- 00344	CS- 00345/	
Location ID	SP- 110923	SP- 110924	
Sample Group	taux 14 mod	FLOWER BED	
Location Description (circle)	Back yard Front yard Side yard Other	Back yard Front yard Side yard Other	Back yard Front yard Side yard Other
Category (circle) (FS FO Field Blank (lot or equipment)	Field Blank (lot or equipment)	FS FD Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surfece Soil Other	Surface Soil Other	Surface Soil Other
Type (circle)	Grab Comp. # subsamples	Grab Comp. # subsamples	Grab Comp. # subsamples
Sample Time	1445	1455	. 18
Top Depth (in.)	0	0	6/2
Bottom Depth (in.)		6	20
Grid, Quadrant, Section		. •	
Field Comments	BD000283, 000284 000285 000286	To the least	
	000 287 000 322		2
-	Entered Validated	Entered Validated	Entered Validated
	Field Te		

Sheet No.: S- 000658

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 🔀	Page No:	Sampling D)ate:
\ddress:	<u> </u>	Owner/Tenant:	Feb. 1905-03-01
Business Name: 53	Johns Sa Illian		
	tial School Commerci		
Sampling Team: MA	CTEC CDM Other	Names: <u>Report Pales</u>	:
Data Itam	Sample 1		Samula 2
Data Item	Sample 1 ,*	Sample 2	Sample 3
Index 1D	CS- 18666	CS- 18667	CS- 18668
Location ID	SP- 126381	SP- 126382	SP- 126383
Sample Group	Field		
Location Description (circle)	Back yard Front yard Side yard Oriveway Other Field East of East of East of	Back yard Front yard Side yard Oriveway Other Field Each of Stateling	Back yard Front yard Side yard Oriveway Other Field End of Full inc.
Category (circle)	FD ofField Blank (lot or equipment)	FS) FD of Field Blank (lot or equipment)	FD of Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other	(Surface Soil) Other	Surface Soil Other
Type (circle)	Grab Comp. # subsamples 5	Grab Comp # subsamples 5	Grab Comp.# subsamples 5
Sample Time	1350	1857	1410
Top Depth (in.)	0	O	. 0
Bottom Depth (in.)			<u> </u>
Field Comments Note if vermiculite is visible in sampled area	BD- 300253 Verminente et la comparent in sumple se diagraent in specific accomparent	80- <u>63,9253</u>	BD- <u>000293</u>
Entered (LFO)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Entered Validated

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For Field Team Completion	· · · · · · · · · · · · · · · · · · ·	QC by 15 5	
Provide Initials*	 Completed by sig 	20 by -, -	

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No:		o: 107 Sampling	Date: <u>10/±2/64</u>
.ddress: <u>308</u>		Qwner/Tenant: 5+	Johns Hospital
Business Name:S	+. John Sr. Liv		
Land Use: Residen		nercial Mining Roadway	Other ()
Sampling Team: MA	CTEC CDM Other	Names: 6. P./2	· · · · · · · · · · · · · · · · · · ·
- 	·	ic in the second	Sample 3 (4)
Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18669	CS- 18670	CS- 18671
Location ID	1		
	SP- 126384	SP- 126385	SP- 126386
Sample Group	Field		1
Location Description (circle)	Back yard Front yard Side yard Oriveway Other Field Eart of Suit	Back yard Front yard Side yard Driveway Other Field East of Building	Back yard Front yard Side yard Driveway Other Field and of huilding
Category (circle)	FD of Field Blank (lot or equipme	FD of int) Field Blank (lot or equipment)	FD ofField Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other	(Surface Soil) Other	Surface Soil Other
Type (circle)	Grab Comp # subsamples _5	Grab Comp # subsamples	Grab Comp. # subsamples 5
Sample Time	1419	1435	1445
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1		<u> </u>
Field Comments Note if vermiculite is visible in sampled area	BD-000283 Vermiculite visible in Sample, See diagno for specific locations	BD- <u>000283</u>	BD- <u>000283</u>
Entered (LFO)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Entered Validated

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For Field Team Completion	Completed by $B_{\mathbb{C}}$	QC by	Q0	
(Provide Initials)	-, ,,,		·) (_(

Sheet No.: S- $\underline{-000650}$

	Ĺ	IBB	Y FIELD S	SAMPLE [DATA SHEE	ET (FSDS) FOR	SOIL
Field Logbo	ook No: _	100	348	Page No: _	107	Sampling Date:	10/20/
			2 MA St	··		enant: Sa John	, ,

Business Name: St. John: St. Living

Land Use: Residential School Commercial Mining Roadway Other ()

Sampling Team: MACTEC CDM Other Names: Acien Policy

Sampling Team: MA	CTEC COM Other		_ Names: <u>Recent</u>	<u> </u>		
Data Item	Sample 1	0127 6	Sample 2	late de	Sample 3	:100
Index ID	CS- 18672		CS- 18673		CS- 18674	\
Location ID	SP- 126387		SP- 126388		SP- 126389	
Sample Group	Field-			-		7
Location Description (circle)	Back yard Front yard Side yard Driveway Other Field Gost of Golds		Back yard Front yard Side yard Driveway Other Field Eart of Su.	<u>(ld</u> .05)	Back yard Front yard Side yard Driveway Other Fixed Euro of Ruild	129
Category (circle)	FD of Field Blank (lot or equipme		FD of Field Blank (lot or equipm	ent)	FS) FD of Field Blank (lot or equipme	7
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other	-	Surface Soil Other	_	Surface Soil Other	-
Type (circle)	Grab Comp # subsamples		Grab Comp. # subsamples 5		Grab Comp # subsamples 5	- -
Sample Time	1500		1515		1527	
Top Depth (in.)	0		0		0	
Bottom Depth (in.)	i				1	
Field Comments Note if vermiculite is visible in sampled area	BD-000283 Vermiculae visible in sample. See diagr for Specific locations		BD- <u>000283</u>		80- <u>000253</u>	7
Entered (LFO)	Volpe: Entered Validated		Volpe: Entered Validated		Volpe: Entered Validated	

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i	(Provide Initials)	Combieren of 12 () ac by	الكرا) احا

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SO

Field Logbook No: _	00348 Page No:	(07 Sampling	Date: 10/2/1041
ddress: <u>308 E</u>	2 hd St	Owner Tenant: 5+.	Johns Hospital
Business Name:S	+ Johns Sr Livin	<u> </u>	
Land Use: Residen	tial School Comme	rcial Mining Roadway	Other (-)
Sampling Team: MA	CTEC CDM Other	Names: B. P. les	
J	pl pl	los)	64
Data Item	Sample 1 \vertilet	Sample 2 101-76	Sample 3 build
Index ID	CS- 18675	CS- 18676	CS- 18677
Location ID	SP- 126390	SP- 126391	SP- 126392
Sample Group	Field		
Location Description (circle)	Back.yard Front yard Side yard Driveway Other Field East of Building	Back yard Front yard Side yard Driveway Other Field East of Building	Back yard Front yard Side yard Driveway Other Feld East of Building
Category (circle)	FS) FD of Field Blank (lot or equipment	FS FD of	FD of
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other	Surface Soil Other	Surface Soil Other
Type (circle)	Grab Comp # subsamples <u>\$</u>	Grab Comp # subsamples	Grab Comp.# subsamples
Sample Time	1537	1545	1605
Top Depth (in.)	0	0	0 .
Bottom Depth (in.)		1	1
Field Comments Note if vermiculite is visible in sampled area	BO-000283 Vermiculité visible in sample. See diagram for Specific locations	BD-000283 No Visible bermouline Seedingrown for Specific locations	80- <u>003283</u>
Entered (LFO)	Volpe: Entered Validated	Volpe: Entered Validated	Volpe: Entered Validated

For Field Team Completion (Provide Initials)

Completed by BP

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LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

⊫ield Logbook No: <u>i</u>	<u> 00348</u> Page No:	<u>107</u> Sampling	Date: <u>!0/27/09</u>
ddress: 30중	E 2nd 5+	Owner)Tenant: ろって	
Business Name: <u> </u>	+ Johns Sr (in:	n <u>s</u>	,
_		rcial Mining Roadway	• •
Sampling Team: MA	CTEC CDM Other	Names: Roun Was	<u> </u>
-	Sample 1 Vigoria	<u> </u>	Sample 3 Vorall
Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18678	CS- 18679	CS- 18680
Location ID	SP- 126393	SP- 126394	SP- 126395
Sample Group	Field —		
Location Description (circle)	Back yard Front yard Side yard Driveway Other <u>Falk East वट किस्सील</u>	Back yard Front yard Side yard Driveway Other Field East of Fielding	Back yard Front yard Side yard Driveway Other Field East of Building
Category (circle)	FS FD of Field Blank (lot or equipment)	FS FD of Field Blank (lot or equipment)	FS) PD of Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other	Surface Soil Other	Surface Soil Other
Type (circle)	Grab Comp # subsamples <u>5</u>	Grab Comp # subsamples 5	Grab Comp # subsamples
Sample Time	1628	1638	1706
Top Depth (in.)	0	0	0
Bottom Depth (in.)			
Field Comments Note if vermiculite is visible in sampled area	No Usible Varmicality See diagram for Specific broations	BD- <u>000283</u>	80-000283
·			<u>'</u>
Entered (LFO)	Volpe: Entered Validated	Volpe; Entered Validated	Volpe: Entered Validated

For Field Team Completion	Completed by	00		QC by	12 C	~ (1)
(Provide Initials)	Completed by	וכי	·		٠٠٠	ענים

Appendix D Exterior Inspection Checklist

LIBBY ASBESTOS PROJECT Exterior Inspection Checklist (EIC)

Field Logbook No.: 1003-	<u> 78</u> Page No.: <u>ノ</u> 3	37 Site Visit Date: 1-18-05
Address: <u>30% E</u> 3	2nd St. s	Structure Description: Property
Occupant: Helipad	Field	Phone Number: MA
Owner (If different than occup	pant): <u>St. Joha's</u>	Hospital Phone Number: 293-0100
Investigation Team:	. Shoul	
Field Form Check Completed	I by (100% of forms): _	BSIP
	•	arphict interior dust samples as necessary
	·	· .
Data Item	Value	Comments
GENERAL INFORMATION		
Any detectable levels of LA on property?	Yes No	Location: See CSS suple
Visible vermiculite on property?	Yes No	Location:
YARD AREAS - ブスック	is a field	
Will any yard area require removal?	Rationale	
Terriovar:	Yes - Gross visible veri	miculite
	Yes - Analytical results	
Ottober 1990 and a section and	No - Vermiculite visible	but soil results are nondetect
Circle all that apply and note high traffic areas.	No - No vermiculite pre	esent
Indicate locations on the sketch.	NA .	

Data Item	Value	Comments
Vegetation on lawn contaminated area only	Grass Field Gravel mix Other None NA	
Trees within contaminated area greater than 6 inches in caliper?	Yes No	Type and number:
		Note location and drip line diameters on sketch
Trees within contaminated area less than 6 inches in caliper?	Yes No	Type and number:
••		Note location on sketch
Shrubs within contaminated area?	Yes (Mo	Type, number, and size::
		Note location on sketch
Secondary structures on property within contaminated area?	Structure Count Shed Deck	Discuss: foundation; open/closed, flooring, and mobility.
	Carport	,
Collect dust samples as necessary	Other:	
		Collect exterior and interior photographs

Data Item	Value	. Comments
Evidence of contamination beneath secondary structures?	Yes - Gross, no sample Yes - Minimal, collect sample	Note distance between soil surface and bottom of secondary structure:
	No	
	NA	Collect soil samples as necessary
Household/yard items located on contaminated area?	Yes (No) NA	Explain contents/mobility and note approximate location(s) on sketch:
	·· :	
Fence present within or adjacent to contaminated area?	Yes No	Type(s), condition, and height:
		Illustrate on sketch.
FLOWERBED		
Are there any flowerbeds present that have visible vermiculite in soil?	YesNo NA - Skip Section	Illustrate on sketch.
Flowerbed contain flowers or plants?	Yes No	Brief description of type(s):
Decorative items (bird baths, trellis, etc.) in flowerbed?	Yes No	Brief description (type, size, mobility):

Page 3 of <u>\$</u>

2.

Data Item	Value	Comments
Does flowerbed have borders/fence?	Yes rullo	Type, size, and material(s):
	<u> </u>	If yes, is it removable?
GARDEN		
Are there any gardens present that have visible	Yes	Illustrate on sketch.
vermiculite in soil?	No NA - Skip Section	Note former versus current
Garden contain crops?	Yes NA No	Brief description:
Decorative items (bird baths, trellis, etc.) in garden?	Yes No	Brief description (type, size, mobility):
Does garden have borders/fence?	Yes No	Type, size, and material(s).
		If yes, is it removable?
DRIVEWAY	·	· · · · · · · · · · · · · · · · · · ·
Type of driveway	Concrete Gravel	Note location on sketch
•	Asphalt Soil	
<i>2</i> *	None	
	Other	

	Data item	Value	Comments
5 .	Will driveway require removal? Only applies to gravel or soil driveways.	Yes - Gross vermiculité Yes - Analytical results No - Vermiculite presente	This is a dirt read; on the property
		NA	
6.	Evidence of vermiculite under driveway? Only applies to concrete or	Yes - Encapsulated Yes - Exposed	
,	asphalt driveways.	NO NA	· .
	Comple	te following only if drive	way is to be removed.
	Approximate length	Feet	see survey
	Approximate width	Feet	
	Approximate depth	hches	
	Any driveway borders?	Railroad ties Brick D	rain/Gutter Other
		Pressure-treated wood	Flowerbed
	SIDEWALKS		
	Type of sidewalk	Concrete Gravel	Note condition and mobility of material if
		Asphalt Flagstone	necessary
		None Other	
7.	Evidence of vermiculite under sidewalk? Only applies to concrete or asphalt sidewalks.	Yes - Encapsulated Yes - Exposed No NA	

Data item	Value	Comments
Complete	following only if vermiculi	te is exposed in sidewalk.
Approximate length	Feet	
Approximate width	Feet A4	
Approximate depth	Inches	
Any sidewalk borders?	Railroad ties Brick	Drain/Gutter
	Other	_
	Flowerbed	
UTILITIES Note: Removal contractor r	nust schedule a utility cle	arance meeting prior to excavation.
Water supply	Well City Water Other NA	
Underground utilities	Water Wastewater Septic system Electrical Phone Sprinkler systems	unknown - check with "U-Dig"
Aboveground utilities	Electrical Phone Television cable/dish	
Heating oil tank	Yes No	
Other utilities not listed		· · · · · · · · · · · · · · · · · · ·
Note special excavation concerns in regards to utilities:		

	<u> </u>						
Data Item	Value	Comments					
OTHER		·					
Visible vermiculite in flower pots/hanging baskets?	Yes No NA	Note number and size of flowerpots and general location:					
Is property used for commercial purposes?	res No						
Does owner have outdoor pets?	Yes No	·					
Evidence of contaminated fill material on property?	Yes No	Illustrate locations and dimensions on sketch					
		Check understructures if SIIC is not completed and collect samples as necessary.					
Does home owner suspect vermiculite contamination at other areas on property?	Yes Ng	Location and history:					
		Collect samples and note on sketch as necessary					
PROPERTY SURVEY							
Will property require land survey? Yes - Excavation required along property boundary and /or consists of yard area - Detail property sketch not needed No - Property sketch needed Explain: Full Save Medical							
	<u> </u>						

	Data Item	Value	Comments
	DESIGN SAMPLING		
8.	Design sampling necessary?	line sketch until sample	
	See phot		og and/or description.
-	•	ADDITIONAL INFO	RMATION
	<u> </u>		
•			
•			
			

Appendix E Analytical Results for Soil Samples Collected, September 2002 and October 2004

				,——-		, ,			`				
:										· ·		PLM	
Sample (D	Parent ID	Scenario		Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin	LA (%)	C (%)
CS-00344-FG		N/A	308 E. 2nd St - St, John's Outpatient Therapy	Yard	Back, from, side yard	Soil-Like	Surface soil	Field Sample	6/12/2002	PLM-VE	A	ND	ND
C\$-00345-FG		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Flowerbed	Front, side yard	Soil-Like	Surface soil	Field Sample	6/12/2002	PLM-VE	. A	NO _.	ND
CS-18666-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	81	TR	ND
CS-18667-FG1		. N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	<u>B1</u>	TR	,ND
CS-18668-FG1		, N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	_TR	ND _
CS-18669-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	TR.	ND
C\$-18670-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE _	В1 -	TR	ND
CS-18671-FG1		N/A	308 E. 2nd St - St, John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	. B1	TR	ND
CS-18672-FG1		N/A _	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	_Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B2	. < 1	ND
CS-18673-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	ND	ND
CS-18674-FG1		, N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A .	ND	ND
CS-18675-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	ND _.	ND
CS-18676-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	"ND	ND
CS-18677-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	<u>A</u>	ND	ND
CS-18678-FG1			308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil		10/27/2004	PLM-VE	A	ND	ND
CS-18679-FG1		N/A	308 E. 2nd St - St, John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	. A	ND.	NĐ
CS-18680-FG1			308 E. 2nd St - St. John's Outpatient Therapy	 Field	Field E of building		Surface		10/27/2004		Α	 ND	ND

				·								PLM	
		Ì						·					
Sample ID	Parent ID	Scenario		Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin	LA (%)	C (%)
CS-00344-FG		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Yard	Back, front, side yard	Soil-Like	Surface soil	Field Sample	6/12/2002	PLM-VE	A	ND	ND
CS-00345-FG		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Flowerbed	Front, side yard	Soil-Like	Surface soil	Field Sample	6/12/2002	PLM-VE	<u>A</u>	ND	ND
CS-18666-FG1		: N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	TR	ND
CS-18667-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	<u>B</u> 1	TR_	ND
CS-18668-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	TR	,ND
CS-18669-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	_Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	TR	ND
CS-18670-FG1		: N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soit	Field Sample	10/27/2004	PLM-VE	B <u>1</u>	TR	ND
CS <u>-1867</u> 1-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B1	TR	_ND
CS-18672-FG1	<u>.</u>	N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	B2		ND
CS-18673-FG1		. N/A	308 E. 2nd St - St. John's - Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004_	PLM-VE	. A	ND	ND.
CS-18674-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field East of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	<u>A</u> .	ND.	ND
CS-18675 <u>-</u> FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A .	ND _.	ND
CS-18676-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	ND	.ND
CS-18677-FG1		Ņ/A	308 E. 2nd St • St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	: _ND	ND
C\$-18678-FG1	· <u>.</u>	. N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	. Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	NO	ND
CS-18679-FG1		N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Şoil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	ND	ND.
CS-18680-FG1	l	N/A	308 E. 2nd St - St. John's Outpatient Therapy	Field	Field E of building	Soil-Like	Surface soil	Field Sample	10/27/2004	PLM-VE	A	ND_	ND

Appendix F Removal Action Work Plan Addendum for St. John's Lutheran Hospital-Helipad Field and Rehabilitation Center

Addendum to the

Response Action Work Plan

St. John's Lutheran Hospital

Helipad Field and Rehabilitation Center Removal Plan 308 East 2nd Street

1.0 Introduction

This addendum to the Response Action Work Plan (RAWP) (CDM Federal Programs Corporation [CDM] 2003) includes property-specific characterization data and planned remedial activities. Specific work to be performed at this property is also detailed on the following Contract Drawings:

- 308 East 2nd Street Exterior Remediation Plan
- 308 East 2nd Street Exterior Restoration Plan

Removal and restoration activities will be conducted in accordance with the RAWP, this RAWP Addendum, and the Design Specifications for Residential Removals (U.S. Department of Transportation John A. Volpe National Transportation Systems Center [Volpe] 2004), forthwith referred to as the Contract Documents. All project quality assurance and quality control requirements for measurement reports will be addressed in a future data summary report.

2.0 Removal and Restoration Activities

This section describes the removal and restoration activities to be performed at this property.

2.1 Exterior:

Planter Boxes, Areas A through C

- Remove and properly dispose of the planter boxes and the soil within them, in accordance with the Contract Documents.
- Restore the planter box areas in accordance with the Contract Documents.

Gravel Pull-out, Area D

- Remove soils from the gravel pull-out to a depth of 12 inches, in accordance with the Contract Documents.
- Restore the excavation area in accordance with the Contract Documents.

Gravel Path, Area E

- Remove soils from the gravel path to a depth of 12 inches, in accordance with the Contract Documents.
- Restore the excavation area in accordance with the Contract Documents.

Gravel Road, Area F

- Remove soils from the gravel road to a depth of 12 inches, in accordance with the Contract Documents.
- Restore the excavation area in accordance with the Contract Documents.

Field, Grids H1 through H11

- Remove soils from the field to a depth of 12 inches, in accordance with the Contract Documents.
- Restore the excavation areas, and replace in kind or return all items to their original locations, in accordance with the Contract Documents.

The total amount of soil to be removed from the property is approximately 3757 cubic yards (yd³). Excavation volumes for individual areas are summarized in a table on the Exterior Remediation Plan.

2.2 Interior:

Based on visual inspections and results of dust samples collected at the property, interior remediation is not required.

3.0 General Information

- The cleanup/construction contractor will provide the water source for personnel and equipment decontamination. Decontamination water will be captured and disposed of properly.
- Only government-authorized personnel will be permitted inside the construction zone during removal and restoration activities.
- The cleanup/construction contractor will not block access to the helipad or the Rehabilitation building.
- The landscaping contractor will water restored plants, sod, and/or hydroseed as needed for a period of seven days. It will then become the property owner's responsibility to maintain these areas.

 If the owner has questions or concerns, he or she should contact the Community Involvement Coordinator at 293-8595.

4.0 Background Information

This section includes property information that was obtained from various investigations and sampling activities performed at this property by CDM.

4.1 Exterior:

- Vermiculite was observed in three planter boxes on the northeast side of the building, throughout the western half of the helipad field, in the gravel road on the north and west portion of the property, and in the gravel path in the central portion of the property. Figure 1 shows areas where gross quantities of vermiculite were observed.
- In total, 17 soil samples were collected from the following areas: the yard surrounding the building, flowerbeds on the south side of the building, and the helipad field. The helipad field was divided into fifteen grids. A five-point composite soil sample was collected from each grid. Sampling grids are shown in Figure 1. Analytical results are summarized in Table 1.

4.2 Interior:

- Vermiculite insulation was not observed within any of the living or storage spaces of any structure located on the property.
- A total of 2 dust samples were collected from the Rehabilitation building.
 Analytical results for both dust samples were non-detect for LA asbestos.
- A total of 2 dust samples were collected within the sheds on the property.
 Analytical results for both dust samples were non-detect for LA asbestos.

A property survey was completed to document existing conditions. The survey includes property boundaries, site features, and site topography, and is used as a base map for the Contract Drawings. The surveyed drawing was combined with the Exterior Inspection Checklist sketch that was completed during the pre-design inspection.

5.0 References

CDM 2003. Response Action Work Plan, U.S. Environmental Protection Agency (EPA) Libby Asbestos Project, Libby, Montana. Prepared for EPA by Volpe and CDM. November.

Volpe 2004. Design Specifications for Residential Removals, EPA Libby Asbestos Project, Libby, Montana. Prepared in conjunction with CDM. April.

I acknowledge that I have received a copy of the Work Plan Addendum for property located at the address stated for review and comment.						
Owner	 Date					

REMOVAL QUANTITIES 308 East 2nd Street March 4, 2005

PLANTER BOX:

Location	Designation	Area (ft²)	Depth (in.)	Volume (yd³)
NE side of building	Area A	107	24	8
NE side of building	Area B	109	36	12
NE side of building	Area C	109	36	12

TOTAL FLOWERBED

32

GRAVEL PULL-OUT:

Location	Designation	Area (ft²)	Depth (in.)	Volume (yd²)
Along E 2nd St.	Area D	692	12	26
`				

TOTAL GARDEN

26

GRAVEL PATH:

Location	Designation	Area (ft²)	Depth (in.)	Volume (yd³)
Middle of property	Area E	2610	12	97
			TOTAL DRIVEWAY	97

GRAVEL ROAD:

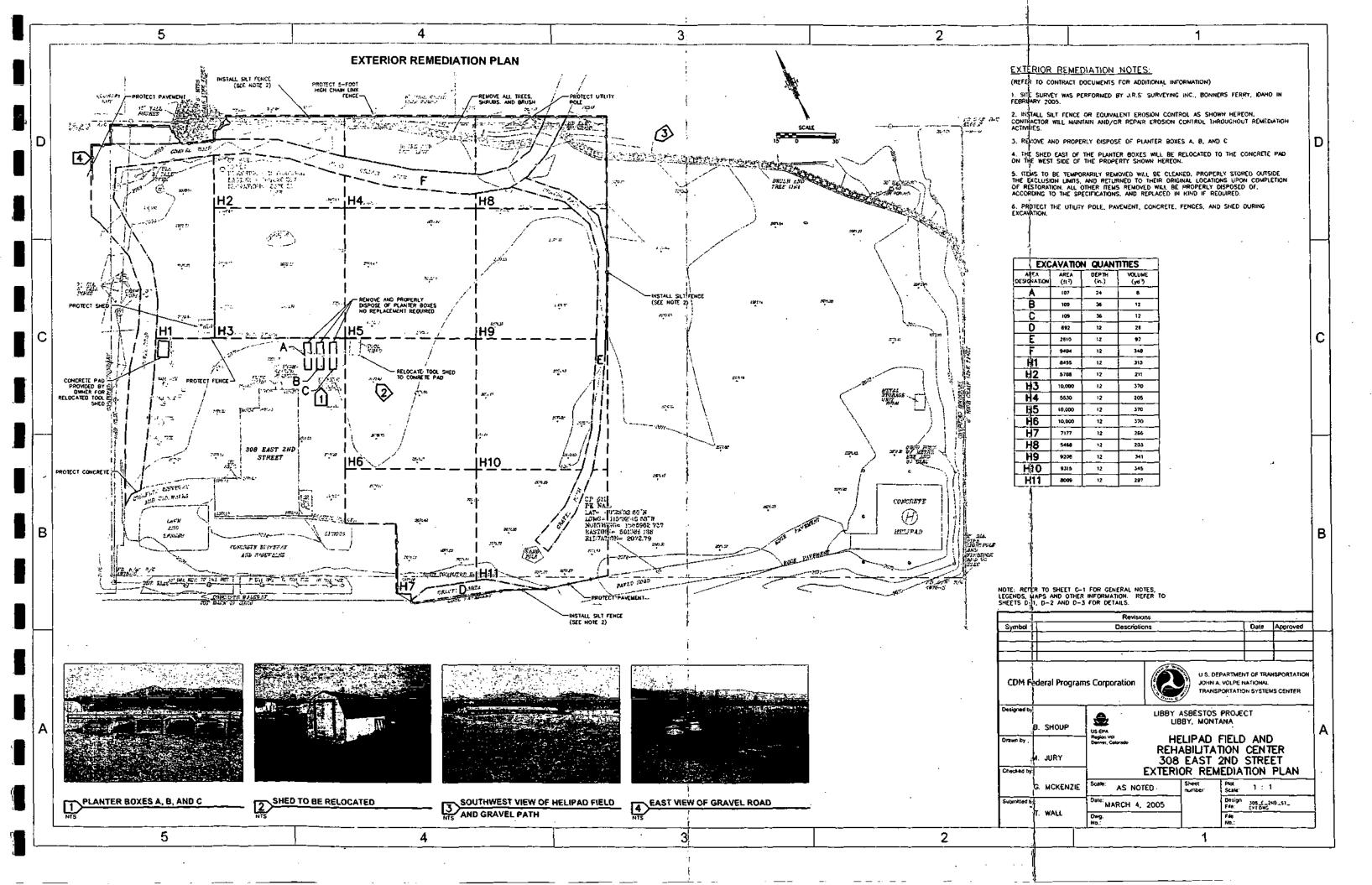
Location	Designation	Area (ft²)	Depth (in.)	Volume (yd³)
N & W sides of property	Area F	9404	12	348
	<u> </u>		TOTAL DRIVEWAY	348

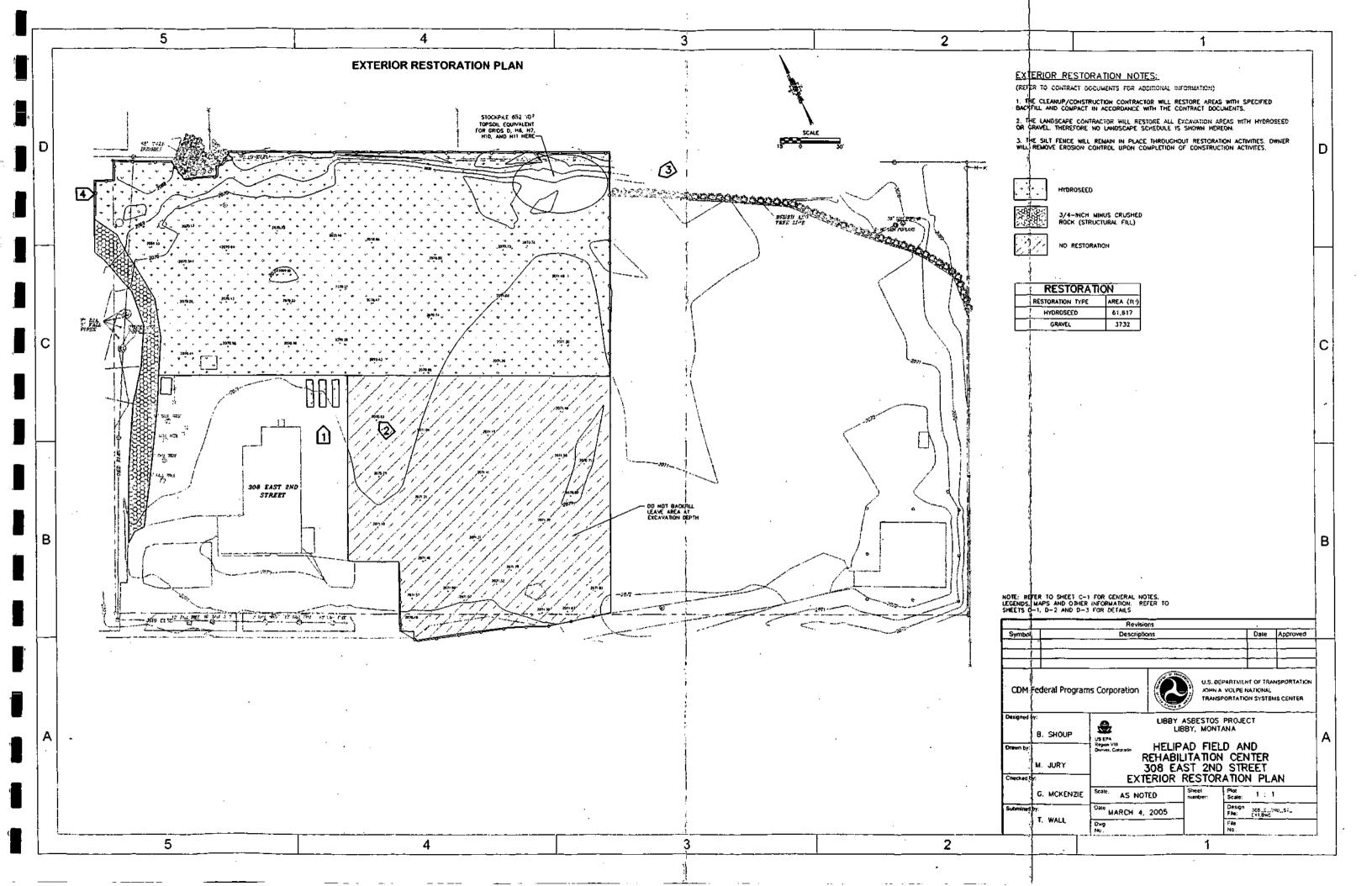
FIELD:

Location	Designation	Area (ft²)	Depth (in.)	Volume (yd²)
Helipad field	Grid H1	8455	12	313
Helipad field	. Grid H2	5708	12	211 .
Helipad field	Grid H3	10000	12	370
Helipad field	Grid H4	5530	12	205
Helipad field	Grid H5	10000	12	370
Helipad field	Grid H6	10000	12	370
Helipad field	Grid H7	7177	12	266
Helipad field	Grid H8	5468	12	203
Helipad field	Grid H9	8208	12	304
Helipad field	Grid H10	9315	12	345
Helipad field	Grid H11	8009	12	297

TOTAL YARD 3254
TOTAL EXCAVATION 3757

Note: All soil excavation areas were calculated using Autocad 2002.





Appendix G Technical Memorandum of CDM Oversight Activities Conducted at the St. John's Hospital Helipad Property



Memorandum

То:

Jim Christiansen, EPA

From:

Paul Opem

Date:

December 16, 2005

DCN:

2616.002.203.REMOS.1793.00

Subject:

2005 CDM Oversight Activities Conducted at the St. John's Hospital

Helipad Property in Libby, Montana

Summary of Site Work

The St. John's Lutheran Hospital Helipad Field and Rehabilitation Center (Helipad) property is located at 308 East 2nd Street in downtown Libby, Montana. The section of the property which underwent remediation in 2005 is an approximately 2.5-acre field-like area south of the Burlington Northern Santa Fe (BNSF) Line railroad tracks. Historical activities at the property included a W.R. Grace vermiculite bagging facility and subsequent City of Libby sports/recreation land. There were no major buildings of any kind within the remediation area.

In total, approximately 7,182 cubic yards (yd³) of Libby vermiculite-containing soil (VCS) was excavated from the Helipad property. In addition, contaminated soil was removed from the planter boxes at the rear of the Rehabilitation Center. Environmental Restoration (ER) was the designated removal and restoration contractor for this site.

The north half of the property was restored with 2,820 yd³ of common fill and 2,300 yd³ of topsoil, including a 652 yd³ stockpile of topsoil. This area was then hydroseeded with an alfalfa mix to replicate the landscape's prior state. No restoration was required in the south half of the property due to St. John's Rehabilitation Center's pending construction plans; ER accordingly left 652 yd³ of topsoil in a stockpile to be used at the discretion of St. John's. In addition, approximately 100 yd³ of gravel was placed to restore a haul road along the west edge of the property.

Summary of Oversight Tasks

CDM Federal Programs Corporation (CDM) Oversight was tasked with monitoring ER's and its subcontractors' work practices for adherence to the Response Action Work Plan (RAWP)¹, Addendum to the RAWP Helipad Removal Plan (RAWP Addendum), and all related project-and site-specific requirements.

Additional oversight activities included collection of samples (perimeter air and soil clearance), control of a daily site logbook, photographic documentation of site conditions, and observance of project health and safety practices. Site progress and any remediation issues were communicated to CDM Construction Management and the John A. Volpe National Transportation Systems Center (Volpe) Onsite Representative on a daily basis.

Timelines for project phases were as follows:

<u>Activity</u>	<u>Dates</u>
Site Setup	August 1 – 2
Removal (Excavation)	August 2 - September 19
Restoration	September 19 – October 13

Sampling

CDM Oversight sampling activities included the daily collection of perimeter air samples during excavation activities. Soil clearance samples were collected as necessary throughout the removal phase and GPS data was gathered for each soil sample location. In total, 31 soil and 116 perimeter air samples were collected. Table 1 provides soil sample results.

Libby amphibole asbestos structures were detected on perimeter air samples on 5 occasions during remediation. Table 2 provides suspected reasons for these detections and the attempted resolutions.

Meetings/Walkthroughs

- On August 1, 2005, CDM and ER met at the site to plan the setup, review RAWP Addendum details, and discuss remediation events.
- On September 30, 2005, CDM Construction Management and Oversight met with the U.S. Environmental Protection Agency (EPA) Onsite Manager, Volpe Onsite Representative, and ER Management to resolve any discrepancies in excavation volumes, Addendum Modification volumes, and necessary restoration volumes. It was concluded that the total volume discrepancy between ER and CDM Oversight figures was 7 yd3.

Final Draft Response Action Work Plan, EPA Libby Asbestos Project, Libby, Montana, November 2003

- On October 13, 2005, CDM conducted a removal final walkthrough at the Helipad. The contractor's restoration work was inspected for conformity with project and site-specific documentation.
- On November 2, 2005, CDM Construction Management and Oversight met with ER
 Management to discuss remedies for a drainage problem at the Quonset hut northwest of
 the Helipad. It was decided that ER would return the following week and correct the
 problem by routing water away from the hut.
- On November 18, 2005, CDM Oversight met with EMR (a BNSF contractor) to discuss restoration needed by BNSF at the Helipad. BNSF cut a road into the northwest Helipad (with St. John's Hospital's permission) earlier that week in order to facilitate a separate removal project.

Post-Restoration Activities

It should be noted that in late October 2005, the business owner in the Quonset hut northwest of the Helipad reported drainage problems resulting from these remediation activities. In order to rectify this drainage issue and return the site's conditions to their original state, CDM requested that ER return to the Helipad to address the situation. During the week ending November 12, 2005, ER placed an additional 5–10 yd³ of gravel, reshaped an area of high elevation, and constructed a drainage swale to direct water away from the hut and its parking area. After completion, this area was seeded and fenced off with caution flagging. On November 14, 2005, BNSF and its contractors installed a gravel road through this drainage swale, extending approximately 100 yards across the NW edge of the restored Helipad property (BNSF needed driving access to excavate at a location next to the railroad tracks). After meeting with EMR, it was agreed that they would fully restore all disturbed areas to the satisfaction of the EPA.

On November 18, 2005, all impacted areas were backfilled to an approximate finish grade, the drainage area of concern was restored, and the fencing was returned. When weather permits, EMR will return to grade the soil and hydroseed with an appropriate alfalfa mix. CDM Oversight will supervise these future restoration activities for conformity with the RAWP Addendum and proper site drainage.

Modifications to RAWP Addendum

During the remediation phase, CDM Construction Management, CDM Oversight, and the Volpe Onsite Representative judged it necessary at times to excavate additional material beyond the RAWP Addendum's scope-of-work. Pocket-like sections with gross amounts of Libby VCS were observed in many locations on the property when excavating, likely owed to the land's location and historical usage.

In total, 10 Modification requests were submitted to the Volpe Onsite Representative. These Modifications resulted in approximately 1,989 yd³ of additional VCS being excavated.

Conclusion

Based upon the CDM oversight performed, the removal and remediation activities were conducted in accordance with EPA-approved Helipad property documents.

cc: Courtney Zamora - Volpe
Timothy Wall - CDM, Cambridge
Jeff Montera - CDM, Denver
Paul Lammers - CDM, Libby
Shawn Oliveira - CDM, Libby
Tommy Cook - CDM, Libby
Libby Project File - Denver
Libby Project File - Libby
Libby Project File - Cambridge

TABLE 1. S	ummary of	Soil Clearance Sample:
01-10	Sample	0
Sample ID	Date	Sample Result ¹
1R-32440	8/3/05	1%
1R-32441	8/4/05	<1%
1R-32442	8/4/05	<1%
1R-32443	8/8/05	<1%
1R-32444	8/9/05	Non-detect
1R-32445	8/9/05	Non-detect
1R-32448	8/10/05	<1%
1R-32449	8/10/05	1%
1R-32387	8/16/05	<1%
1R-32388	8/18/05	Non-detect
1R-32389	8/18/05	<1%
1R-32395	8/19/05	Non-detect
1R-32751	8/22/05	Non-detect
1R-32755	8/24/05	Non-detect
1R-32756	8/24/05	<1%
1R-32757	8/24/05	Non-detect
1R-32758	8/25/05	Non-detect
1R-32960	8/30/05	Non-detect
1R-32961	8/30/05	Non-detect
1R-32964	8/31/05	Non-detect
1R-32968	9/8/05	<1%
1R-32969	9/8/05	Non-detect
1R-33304	9/15/05	Non-detect
1R-32979	9/15/05	<1%
1R-33300	9/15/05	<1%
1R-33301	9/15/05	<1%
1R-33302	9/15/05	<1%
1R-33303	9/15/05	<1%
1R-33305	9/16/05	Non-detect
1R-33382	9/19/05	Non-detect
1R-33383	9/19/05	<1%

Libby amphibole asbestos content by polarized light microscopy (PLM) 9002

	TABLE 2. Summary of Perimeter Air Samples with Detects				
Sample Date	Number of Libby Amphibole Structures Detected	Suspected Contributing Site Condition	Resolution		
8/5/05	1	Increasingly high winds in afternoon.	Construction was stopped on 8/5/05 in late afternoon because high winds did not cease.		
8/16/05	1	Soil remains dusty because it was not soaked well in advance of excavation.	ER to soak grids prior to excavation by way of mobile sprinkler system and water truck.		
8/30/05	1 each on 2 samples	Documented ER use of only 1 water hose operator with increasing afternoon winds.	Excavation stopped and ER asked to be more diligent about water usage and to implement an additional hose operator for dust suppression in such conditions.		
9/7/05	1	Excavator operator and labor loading too fast in windy conditions.	ER asked to work at a more manageable speed, mixing water into soil with excavator bucket before loading.		
9/9/05	1	High winds.	Excavation stopped and ER asked to be more attentive to weather patterns.		